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EDITED BY JULIUS F. MINER, M. D.,

Professor of Special Surgery in the Buffalo Medical College; Surgeon to the Buffalo General Hospital; Surgeon to the Buffalo Hospital of the Sisters of Charity, etc., etc.

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Original Communications.

ART. I.--*Cynanche Trachealis and Crural Phlebitis.* By L. B. Cotes, M. D., Batavia.

It is a singular fact, and one that cannot be explained, that specific epidemics have specific influences and specific localities in the human system, and what is most remarkable, that it may be confined to so small a space; the mucous membrane lining the air passages, is attacked at one time at one point and then at another, every variety of cynanche at different times.

The term croup is applied to that species of cynanche which lies between the bronchi and the larynx, sometimes over-reaching these points. The acute form of this disease as occurring in children is the most grave, but notwithstanding its acknowledged gravity through these many centuries, no one well defined mode of treatment has stood the test of experience. We are constantly presented with something new or pretending to be new, and no fixed plan that I am aware of is adopted by the profession.

The pathology of this malady is sufficiently understood, if not sufficiently studied, and kept in view in the treatment.

We are presented with a child from eight months to six years old more or less, as the case may be, fleshy or not, with hot, dry or moist surface, face red or pale, as the case may be, hurried respiration, pulse 130 to 160, great thirst, stridulous or barking cough, in short, with unmistakable indications of dynamic disease.

With this view and under these circumstances, I treated the disease with the lancet, triple salt of antimony, hot vapor and fomentations, over twenty years, adding tonics in the intermittent and remittent forms; this treatment was followed perhaps with ordinary success; at the same time, I confess, that I was in some quandary, as others seemed to be then and now, because I could not cure more of my patients; for the last sixteen years I have been more successful.

In 1854, my eyes fell upon the first article that I had seen from Dr. Norwood in relation to the medicinal properties and uses of Veratrum Viride. I was forcibly struck with it, and having a case of crural phlebitis in its inception, making rapid strides, I wrote to him, and received promptly by mail ℥ij of his tincture, At this time I found my patient, three miles away, with limb painful and swollen from body to toes, high fever, with pulse 140, knotty tense painful cord following the direction of the vessels, etc. My patient had been bled, catharticised, and was then taking antimony, digitalis and anodynes, with only temporary benefit.

I directed tinc. veratrum viride gtt. vi. to be given every three hours until I shouldvisit her at eight o'clock next morning, if vomiting or other marked effect should not be produced. Unfortunately I was called away before that hour four miles in the opposite direction, and was not able to see her until 3½ p. m., when I found her without pain, calm, cool, pulse at fifty, and very pale, felt no other inconvenience than a little prostration, she could even move her limb slightly, which she had not been able to do for several days; gave her an anodyne with directions to resume the medicine, giving three every three hours when the pulse began to come up.

Without further particulars, I will simply state, that from this time, under the continued influence of the hellebore for two weeks, I had the satisfaction of seeing the fever and inflammation vanish, and Mrs. T—, my *prima para,* go on to get well, and no permanent injury of the limb followed.

It was not long after this, (a thing that I had much coveted) before I was called to a case of membranous croup, well formed, with symptoms above alluded to, a child of 19 months, with pulse 160. I commenced with the veratrum and repeated the doses every hour until emesis was produced, this reduced the pulse to about 80, and the fever very much reduced. As soon as these began to return, the use of the remedy was resumed and continued; in a few hours my patient began to expectorate tenacious shreddy mucous, clearly indicating what was going on; the child rapidly recovered with free expectoration.

I need hardly say that my plan in the future use of this remedy was more fully formed, and I commenced an extensive use of it, and resorted to it wherever I found increased heat and pulse; and although it is a remedy of acknowledged potency, it is not, like others of this class, frought with danger in the hands of the scientific physician. I have used it in croup where the membrane was being formed, (being called late, or in council,) holding the pulse and fever, and carrying with it the use of mercury, until the membrane was thrown off, and in one instance, its expulsion came near suffocation.

In acute rheumatism, pleuro-pneumonia, &c., it is of undoubted efficacy.

In sub-acute forms of disease, it can not be used with advantage so extensively, as in typhoid fever, scarlatina, diphtheria, &c., but in very many of these it may be used in the first stage with benefit where there is a putrescent tendency from inception, it is evidently contra-indicated. At the same time, in many of those cases, where serious complications are threatened, and where aconite or antimony in $\frac{1}{16}$ to $\frac{1}{20}$ grs., to the adult every four or six hours, and less to the child, is admissable, veratrum may be employed to advantage, reducing the pulse to between 70 and 80, and holding it there until a decided amelioration in the more urgent symptoms is produced; often the skin becomes relaxed, diaphoresis supervenes, quite resembling a crisis, and I have no doubt often lessens the duration of disease.

It should be borne in mind, that to administer a few doses of veratrum and relinquish it, we shall come short of realizing our purpose; it must be continued until our patient is cured or placed on a safe footing.

If occasionally alarming prostration seems to threaten, stimulants will support and sustain; sometimes it produces an irritant effect upon the nervous system and mucous membranes; an anodyne will soften this.

Much has been written upon the medicinal use and properties of this article, but as far as my limited observation enables me to judge, it does not occupy the high place it merits in the treatment of the diseases indicated in this heading.

Comparatively little or nothing has been written of its use in crural phlebitis. My experience of sixteen years duration with it convinces me fully of the power of veratrum, to cut short this poisonous malady, when early and persistently used with appropriate adjuvants. I have had some severe cases, and some of which I apprehend would have been followed with permanent injury to the limb without it.

So sanguine am I of its beneficial influence in controlling the progress of these two diseases, that I do not hesitate to invite the personal experience of medical brethren to a thorough trial, not doubting but their reports will be quite satisfactory, showing a less per centage of fatal and badly cured cases.

In pneumonia, pleuro-pneumonia, &c., it is equally potent, and so much has been said in relation to its successful administration here, that I simply take this opportunity of recording my testimony with others in relation to this fact, hoping to see much more said upon its successful use, especially in discussions where *croup* is introduced before medical bodies.

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ART. II.—*Case of Protracted Labor.* By L. A. HARCOURT, M. D., Chicago.

At 11 o'clock on the night of Nov. 30th, 1870, I was summoned to attend Mrs. King, Elston Road, Chicago, aged 27 years, in labor with her first child. At 2 p. m. the day before, while engaged in rinsing clothes, she was suddenly seized with pain in her right side, which compelled her to go to bed. Since that time she had had pains, recurring at irregular intervals of 10, 20 or 30 minutes, sometimes ceasing altogether for an hour. She had not kept her bed all the time; but had slept none since the pains came on. She did not expect to be confined before the 15th of December.

An examination per vaginum showed that labor had begun, but made little progress. The os was thick, rigid and undilated, far back towards the sacrum, and so high up that it could barely be reached by the index finger. The vertex presented, over which the anterior portion of the inferior segment of the uterus was drawn like a night-cap. Through this segment the sagittal suture could be distinctly felt, occupying the left oblique diameter of the pelvis, the posterior fontanelle at or near the left acetabular region. The pelvis was below the normal size, without deformity of contour, and as the woman herself was small, the probabilities were that the size of the fœtal head would be commensurate with that of the pelvis, hence I did not anticipate trouble on that score. The pulse was normal, respiration easy, bowels and kidneys in good condition, yet the woman looked a little anxious. Told her her labor would be tedious, but nevertheless safe, to borrow no trouble and all would be well. I then went home, leaving two or three Dover's powders for her to take with a view of procuring sleep.

At 7 a. m. Dec. 1st, called again. The patient had taken only one powder, and had slept none. The pains had continued all night to very little purpose. The os was slightly dilated, but still unyielding; patient fatigued and worn from want of rest. Prescribed the chloral hydrate in ten grain doses, to be repeated every two hours until rest would be obtained. At 1 o'clock p. m. the patient had slept comfortably for two hours, also between the pains. The os was still rigid, dilatation very slight. Prescribed tart. Ant. et Potass in minute doses, combined with morphia, to be repeated every hour; the chloral to be given as required.

At 7 p. m. called again, and found the patient comfortable. She had slept all the afternoon except during the pains. Her bowels had moved spontaneously, and the bladder had been freely evacuated. The rigidity of the os had very much disappeared, the dilatation being about the size of a dollar. The pains were more efficient, and the prospect seemed fair that the labor would terminate that night. In fact there was no apparent reason why it should not be completed by midnight. Remained all night, and had an excellent opportunity of observing the effects of the chloral hydrate, which I administered from time to time. The patient would wake up during a pain, and the instant it was over, fall into a natural and refreshing sleep. Thus it continued all night, and though the labor progressed slowly, I had the satisfaction of knowing that my patient had gained fresh strength and vigor to renew the conflict on the coming day. Just here, it may not be out of place to say that in cases of this kind, I have found the hydrate of chloral a most admirable remedy. Have used it where opium would not be tolerated, and in every instance with the happiest results.

At 7 a. m. Dec. 2d, went home to breakfast. Called three or four times in the course of the day to note the progress of the case. It was very tedious, but as the membranes were still intact, I concluded to exercise patience, and not interfere unless the safety of mother or child demanded intervention.

At 8 p. m. the dilatation being almost complete, and the os no longer rigid, I ruptured the membranes, hoping that the uterus would contract more firmly, and thus expedite the delivery. The pains did increase, still the progress was very slow. By ten o'clock rotation had taken place, and the occiput began to engage in the arch of the pubes. The uterine efforts seeming ineffectual, I gave half a teaspoonful of the fluid extract of ergot. In fifteen minutes gave a teaspoonful, and in half an hour more gave two teaspoonfuls, and so on until the patient had taken in all an ounce, without producing the desired result, viz., vigorous and expulsive pains.

At half-past twelve the head ceased to advance. It was not actually locked, but filled the pelvic cavity like a wedge, and I became convinced that nature would not accomplish the delivery in time to save the child, if, indeed, it succeeded at all. The woman, too, could not continue the struggle much longer without seriously compromising her own safety. Not having my forceps with me, and living a long way from the place, I sent for Dr. R. H. Harcourt, who lived nearer. He applied the instruments, and in a few minutes delivered the woman of a healthy, living child. Her labor had continued almost uninterrupted for eighty-four hours, yet nothing untoward supervened. Her recovery was speedy and complete. I attributed her comparative exemption from exhaustion, the usual result of protracted labor, to the rest obtained from the judicious use of the chloral hydrate.

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ART. III.—*Operation for Procidentia Uteri.* By C. C. F. GAY, M. D., Surgeon to the Buffalo General Hospital.

Mrs. Rosanna G., aged 35 years, has had procidentia complete for 13 years. Has borne five children, three of whom were born since the occurrence of procidentia. The os protrudes two or two and a half inches beyond the vulva. Treatment, preliminary to operation, consisted of application of weak solution of nitrate of silver to the prolapsed surface of the vaginal walls, and the administration of a dose of castor oil the evening previous to the operation.

On June 6th, 1871, I operated in the following manner, there being present Drs. Gould, Boardman, Barnes, Chace, Willoughby and McNeal, and Mr. Bartow, medical student. Chloroform was administered, and the woman placed in the semi-prone position upon a table, with the limbs flexed. Sims' speculum was used.

I ante-verted the uterus as recommended by Dr. Emmett, in order to keep the os well up out of the way, but notwithstanding, found the uterine holder in the hands of an assistant of service.

The mucous membrane in front of the os was now seized, and caught up by the tenacula, one in each hand, at two points, and brought together at the centre, when it was ascertained that a strip four inches in length could be denuded, and brought in apposition without causing much tension.

One of the tenacula was dropped, and the other, held by the hand, caught in the mucous membrane, and a strip denuded three-quarters of an inch in length, in line with the axis of the vagina, by one half inch in width. This completed, the other tenaculum was taken up and the same amount of surface denuded. These two raw surfaces were now connected by denuding a strip of mucous membrane one half inch wide across and in front of the os, making a denuded surface upon the anterior wall of the vagina, and in front of the os, from four inches to four inches and a half in length.

This raw surface was now brought together by introducing two silver sutures with a running stitch, one suture passing along the upper margin and the other the lower margin. The wire was drawn through with the silk loop, the parts brought together and the wire twisted. In this respect I did not follow Emmett, as it will be recollected that he uses but a single suture in this part of the operation. I am not able to say that there is any advantage in using the two instead of one suture, but it would appear that when two are used, the parts ought to be doubly secure. In finishing the operation I again departed from the plan recommended, not indeed, so much from choice, as from compulsion, in consequence of the peculiar conformation of the vaginal walls, and on account also of the position of the redundant mucous membrane, which prolapsed. My incisions did not diverge from a point just above the meatus and run up so as to connect with the horizontal strip, but when completed the surface denuded was shaped like the letter **U**, the convexity looking toward the vaginal outlet, and did not reach down so nearly to the meatus by three-quarters of an inch as in Emmett's operation, and the two lines of denuded surface were nearly parallel, thus it will be seen that much more tissue would be taken up and enclosed within this space when the raw surfaces were brought together. I found one advantage in this, not so many sutures were required as would have been necessary had the incisions ran down to the meatus. Seven or eight sutures were used, whereas, had the denudation extended down to a point, at least three more sutures would have been required.

The parts were approximated, the sutures twisted, cut off one inch in length, and turned upward. On the eleventh day the sutures were removed and union found to have taken place throughout the entire extent of my scarifications. On the 23d of June the patient was setting up in bed. I made digital examination, and cannot hesitate to say that the success of the operation is complete.

Just sufficient opium was given to constipate the bowels, and the bladder was twice or thrice daily evacuated by the catheter. Made examination July 5th, there is no further prolapse, and the woman is walking about her room, and up and down stairs.

CASE II.—Mrs. Joice, aged 42 years, has borne six children. The procidentia is complete, having existed for one year, and was caused, she says, by coughing, Preliminary treatment, which consisted of local application of nitrate silver grs. ij. to aqua ℥i. daily, was continued for ten days.

On August 5th, 1871, under the influence of chloroform the operation was performed for radical cure. The woman was placed upon a small table in the semi-prone position, and the speculum of Sims used. The operation was done in all essential respects like the former, only the first suture was doubled, as used by Emmett, instead of using two single sutures as in the former case reported. It being so very tedious to introduce the first suture in a running stitch through so long a surface, it, of course, is desirable to dispense with one of them, provided the double suture will answer as well. The portion of mucus membrane denuded near the meatus was circular and not pointed. The mucous membrane was very tough, requiring a sharp pointed needle to penetrate easily. There was not much hemorrhage, and all the cutting was done with the double curved scissors.

Nine sutures in all were used. On August 15th, the eleventh day after the operation, the sutures were removed, and firm union obtained. The floor upon which the os uteri may rest feels firm and strong as a good sized rope, and it will be impossible, without very considerable vaginal dilation, for the uterus or vaginal walls again to prolapse.⁂

⁂**NOTE.**—A report of these and similar cases, made a year or two later would be of value; time is required before results in such cases can be properly estimated. Dr. West, in his work on diseases of women, speaking on this subject, says: "A verdict not more favorable must be pronounced on an operation, which has sometimes been practiced, which consists in the endeavor to contract the vaginal canal, either by the removal of strips of the mucous membrane, or by the use of actual cautery, or of strong caustics, so as to produce cicatrices on its walls, and consequent shrinking of its calibre, or by the insertion of sutures in a peculiar manner, with the view of obtaining a similar result. The objection, and to my mind, the fatal objection, to these as to the other surgical proceedings for the cure of prolapsus uteri, is furnished not merely by the imperfect nature of the cure which they accomplish, and the new discomforts and inconveniences which they substitute for those before experienced. but still more by the want of permanence in their result, even when their issue is most fortunate, and this objection seems to me all the more serious, since failure in this respect appears to be the rule, success the rare exception. I think, too, that if we consider the circumstance in which prolapsus, either of the uterus, rectum or bladder takes place, we can scarcely expect that the result of the operation should be other than temporary; that the cicatrix tissues should yield to the pressure from above, and all their other causes remaining unremoved, misplacement of the organs should in most instances recur. The operations already referred to, seemed to deserve rejection rather on account of their inadequacy to effect a permanent cure of the evils for the removal of which they have been suggested, than on account of the great difficulties or great danger of their performance."—ED.

ART. IV.—*Abstract of the Proceedings of the Buffalo Medical Association.*

BUFFALO, August 1st, 1871.

The President, Dr. Johnson, in the Chair.

Dr. Miner reported a case he had recently attended with Dr. Kamerling, of gun-shot wound of the arm and forearm. The patient, a child, received a charge of shot through the left arm and also the forearm, which, at the time, was bent so as to be on the same level. The humerus was shattered so that about three inches of its shaft were removed, and about the same amount from both the ulna and radius. There was no pulsation of the arteries perceptible at the wrist, nor in the arm. The muscular tissues were extensively destroyed, and amputation seemed imperative. As neither the shoulder nor elbow joints were implicated, and having in mind the wonderful results constantly obtained by conservative surgery, they determined to make an attempt to save the arm. The extremities of all the bones were resected, and all the loose pieces of bone removed, and the wounds carefully cleaned; a large part of the ulna was found destroyed. The arm was then laid on a splint and warm water dressing applied. There was at no time any severe hemorrhage. The next day the patient was much improved, had suffered but little pain, and the circulation in the forearm was nearly normal. It is now two weeks since the receipt of the injury, and the progress of the case is, in every respect satisfactory, and there is no doubt of a successful result as to saving the arm, and probably a useful one. It is well known that a wooden or artificial arm is of little benefit to the wearer. If a hand could be saved to a child, it would be useful if only as an ornament, and an arm with no bone in it would be more serviceable than any artificial substitute. The arm in this case will, no doubt, be considerably shortened, but will be very useful. If it can become an established rule in surgery, that an arm with such an injury as this can be saved, we have accomplished what, not long ago, would not have been attempted. During the late war, no doubt many limbs were amputated which might, if proper care could have been bestowed on them, have been saved, and been of immense service to their possessors, especially is this the case with the upper extremities.

Surgically considered, a thumb is of as much use as a leg, and owing to its importance, as much as possible of this small member should be saved.

Dr. M. had taken out one-half of the second phalanx, and had a good and useful thumb, and has even removed the whole of it with fair result.

Another case of injury of the arm was related. A young man was coupling cars, and his arm was caught between them. The soft parts in front of the elbow joint were very badly lacerated,and the ulna fractured, and the brachial artery entirely obliterated at this point, so that there was no pulsation perceptible at either the ulna or radial arteries. There was some circulation noticed on the back of the arm, through the anastomosing vessels. The hand was livid, and symptoms indicated the possible necessity of amputation. This last resort was, however, held in reserve, and an attempt made to save the arm. The next day it had improved much in appearance. The circulation was very good, and now, at the end of a week, the patient was sitting up, feeling quite well, and there are flattering prospects of a serviceable arm.

There is probably great risk of pyæmia in those cases, but not sufficient to counterbalance the resulting good.

Dr. Strong remarked that he was glad that surgeons were paying more attention to conservative surgery than formerly. Amputation should be held in reserve, especially in injuries of the upper extremities. A poor arm is better than no arm, or an artificial one, and even a hand, especially a right hand, is of immense value. In the army, innumerable arms were sacrificed which might have been saved. In a case which he treated with Dr. Miner, some time since, more of the humerus was removed than had been recorded at any previous time; it was a triumph of conservative surgery of itself. The case was complicated by a severe wound across the chest, which laid bare the rib, a portion of which was removed, but in spite of this severe complication, the treatment of the arm was a success. Two-thirds of the upper portion of the humerus was removed, but the patient now has perfect use of the arm below the elbow, and can raise the hand to his head.

Is of the opinion that in almost any injury to the bones of the arm, it may be saved if the circulation is intact. The joints, when destroyed, can be exsected, and a useful arm saved. Saw a case of exsection of the elbow joint in the army, after the battle of Antietam. The case went on two weeks, and it seemed that amputation would have to be performed, but concluded first to exsect the joint. Both ends of the articulating bones were sawn off, and the arm dressed in a semi-flexed position. In one year after the patient could write with the arm. Dr. S., also thinks that pyæmia may be counteracted, and the poison eliminated from the system by the use of quinine. He had much experience with this disease and its treatment in army hospitals, and quinine was his chief remedy.

Dr. Wetmore saw a case similar to that reported by Dr. Miner, in Cleveland last winter, where the circulation in the radial and ulna arteries was destroyed by pressure and contusion of the brachial at the elbow. The circulation was, after a time, fully restored through the anastomotica magna, and the intrasseous arteries. Is of the opinion that quinine is of great service in the treatment of pyæmia, which he believed to be more potable after severe injuries where amputation was not performed, than followed that operation.

Dr. Slocum related a case of dislocation of the humerus downward into the axilla, which he attended last spring. For the first five days after the reduction of the dislocation all progressed well, but on the sixth there was much swelling and pain, especially in the hand. Reduced the swelling as well as possible, and then the parts became edematous. At the seventh week again there was severe inflammation. Counsel was called in and amputation advised. This extreme measure, however. was not carried out. At present there is considerable swelling of the arm. The patient has good use of the elbow joint, and perfect use of the fore-arm and hand. Thinks that the train of unfavorable symptoms following the reduction of the dislocation was due to injury of the brachial nerve at the axilla.

Dr. Miner said that Dr. Strong had intimated in his remarks, that surgeons generally had not faith in quinine for the treatment of pyæmia which it deserves. He thought that physicians might have too great confidence in its power in the treatment and prevention of pyæmia. Support of the system against the depressing effects of the poison circulating in the blood, was of the greatest benefit, and quinine would in a degree assist, but he did not believe that it had any specific anti-poison properties, as claimed by Dr. Strong. When given in one grain doses its effects are not noticeable on the system. In larger doses, it is of value as an antidote to the malarious poisons, and when its good effects were seen in the army, he believed they were due to its control over malarial diseases, and not to any specific action on the pyæmic poison, and the same remark would apply to its use here at the present time.

Dr. Strong replied that quinine, or rather Cincho-quinia, for he favors the active properties of the bark, rather than its alkaloids, produce both tonic and antiseptic effects, and if it will counteract malarial poisons, why will it not also control, by its tonic effects on the system, and counteract, by its specific powers, other blood poisons. He regards it as a specific and tonic, when given in sufficient quantity. It will also vastly restrain suppuration. When in charge of a large army hospital, he used large quantities in all cases of suppurating wounds, and the effect was plainly visible in repressing suppuration and promoting their healing. It should be associated with stimulants and aliments.

Dr. Miner said that as Dr. Strong so readily stepped from the poison of pyæmia to the malarial poison, and claimed quinine as a specific for both, both being blood poisons, he could as well go a little farther, and include the poison of syphilis, diphtheria, scarlatina, &c., all of which, he would not deny, were blood poisons, but quinine, it is well known, is not a remedy of any value as a specific against syphilis or the other diseases named. If it has anything to do in the elimination of blood poisons, it does so by virtue of its tonic properties, and anything that will sustain the system, will assist this process of elimination, but this can not be called a result of any specific power.

Some further discussion at this point followed between these gentlemen, when the association adjourned.

W. C. PHELPS, *Secretary.*

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Correspondence.

CHICAGO, July 29th, 1871.

PROF. J. F. MINER,

DEAR SIR :—In the June number of your journal is a report of a meeting of the Albany County Medical Society, the following paragraph occurs :—"Dr. C. D. Mosher wished to know the experience of the members with regard to the hydrate of chloral, he having lost a patient by the use of one grain."

Now this is, to say the least, a very indefinite statement. Nothing is said of the age, sex or condition of the patient; but simply that he, she or it, died from the use of one grain of the chloral hydrate. We are left to infer that one grain of what is fast becoming a popular drug, may prove fatal at any time, and in any case. This is at variance with my experience in the use of this remedy. I will give one or two cases in point.

Case I.—Mrs. T., aged 22 years, married, the mother of two children, the youngest six months old, on the night of March 15th, 1871, immediately after coition with her husband, injected into the vagina a strong solution of alum, and was instantly seized with excrutiating pain in the region of the womb, that organ apparently being thrown into violent spasms. The solution was quite cold. I saw her about fifteen minutes after the operation. She was in the most terrible agony I ever witnessed, fairly writhing with pain. She suffered more in five minutes than any woman could in the worst imaginable case of labor. Her face was flushed and contorted, her eyes glaring, teeth chattering, pulse high and bounding, and the mind in a state of phrensy, bordering upon delirium. I instantly administered thirty grains of the hydrate of chloral, injected warm water into the vagina, and applied flannel cloths, rinsed out of hot water, and saturated with a mixture of turpentine, olive oil and laudanum, over the hypogastric region. In fifteen minutes repeated the dose of chloral, determined to allay the pain if possible. This afforded marked relief for a time; but the paroxysm returning, I exhibited the chloral in fifteen grain doses every half hour or hour as required, until she fell asleep. She took, in all, ʒijss of chloral, and slept from twelve or one o'clock till morning. I should have mentioned that the accident—if such it may be called—happened about nine o'clock at night. The next day there was evidence of acute metritis, which yielded to the usual remedies. In a week I dismissed the case, and in another she was herself again. I watched the case with peculiar interest, having read a day or two before of a death from the same cause.

Case II.—Thursday March 30th, 1871, was called to see Mrs.

Lavin, Peoria street, aged 27 years, married, the mother of three children, the youngest two days old. The day after her confinement she took a cathartic which operated harshly. Wednesday night she got out of bed alone to go to stool, fell on the floor, and remained in an insensible state for more than half an hour. She had only her night dress on, and when found was chilled with cold and quite sick. Next day she was taken with convulsions, in one of which I found her. Chloral in half drachm doses controlled the convulsions and prevented its return. In this case, also, as might be expected, there was metritis, which yielded to appropriate treatment. The woman made a good recovery. She had been attended by a german midwife, from whom I could learn little of her labor.

I could mention many cases in which I have used chloral in doses of from five to thirty grains, in all of which the result was pleasant and satisfactory. Have heard Prof. Miller of Rush Medical College, Chicago, speak highly of its use in mid-wifery, and relate cases in which he believed convulsions had been forestalled by its timely administration.

I would like to know something of the history of Dr. Mosher's case, being skeptical as to the fatality of chloral in doses of one grain.

Truly Yours,

L. A. HARCOURT.

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Homœopathy and Regular Medicine,

To the Editor of the Buffalo Medical and Surgical Journal:

It will be to the advantage of the regular medical profession to go carefully over their treatment of the class of physicians who have seen fit to denominate themselves homœopathic, and to observe the effect such treatment has had upon the profession itself, upon the public and upon homœopathy.

That the accumulated experience of faithful observers, who, for the last four thousand years have given their lives to the study and treatment of disease, is, we believe, of almost invaluable importance to one who wishes to become a physician, and certainly is of infinite importance when compared with a hypothetical dogma, and yet, with all the machinery of our hospitals and dispensaries, the control of every medical appointment in the gift of governments or corporations, with our medical schools perfectly equipped with professors for every separate department of medicine, and an entire monopoly of the advantages of clinical observations, with all these advantages and precedents, what headway have we made in convincing the public and individuals of our superior ability to manage diseases, or of our peculiar fitness for becoming the sanitary officers of households or communities?

The line of treatment which the regular profession saw fit to adopt in the earliest days of homœopathy, and which they are still following, is generally bigoted, and universally intolerant opposition. What is the effect of this opposition? It is to arouse in the public mind that generous American sentiment which ever asserts itself to see fair play between a big boy and a little one. There is scarcely an instance in which the regular profession, with all its accumulated prestige, has arrayed itself against homœopathy, where the weaker party have not prevailed. And to-day, in the sight of the law, and in the confidence of the people, homœopathy is the peer of regular medicine.

It becomes us to go over this case, and, if possible, discover why, we so strong in numbers, and in all the facilities and appliances for illustrating and enforcing our tenets, are so repeatedly beaten? Why is it that individuals and corporations are becoming convinced that their interests require them to employ homœopathic in preference to regular physicians? For myself, in spite of the logic of events, I still believe, and my belief is founded upon a thorough investigation of the principles of homœopathy, and observations upon the practice of many of its most distinguished disciples, that in no way can a man so efficiently equip himself for the responsibility of the management of disease, and the custody of health as in the study of regular medicine.

If we take it for granted that the past experience and observations of physicians are of service to physicians at present, and I do not think we will be charged with assumption, for considering this an axiom; then why is it that a sect which disregards all traditions of medicine, and found their system upon a dogma which contradicts all that we have held as truth, why is it that they are flourishing and we are going to the wall?

The answer to this question presents itself to my mind under two heads, which may be formularized as follows: Homœopathy lives upon the disgrace brought upon the profession of medicine by the low standard of medical education, and flourish upon the intolerant opposition it has received at the hands of regular physicians.

It is with the second, the lesser of the two evils I propose to deal at this time.

The treatment of homœopathy by the regular profession in past years is so well known as to require no mention, therefore let us turn our attention to the present, and by reading its signs in the light of the past, endeavor to do something for our future.

The position of the regular profession in regard to homœopathy may be expressed in few words. We are not aware of their existence. They have no professional rights which we are bound to respect, and when forced by some laymen to speak upon the subject, or give an opinion upon homœopathy, the opinion is that it is a "a humbug." This line of treatment was bad enough when homœopathy was young, but now when we stand on equal footing before the law, and nearly equal before the public, it is suicidal.

It may be well to explain what I mean by equal rights before the law. All the rights which members of the regular profession of this State enjoy are granted them by Acts of Legislature, the first of which was passed April 10th, 1813, this and the Act of 1827, contain the "Regulations concerning the Practice of Physic and Surgery in this State." They provide for the establishment of County Medical Societies, "the only organization existing under law for the purpose of diffusing true science and the knowledge of the healing art," and otherwise point out and fix the duties, responsibilities and immunities of physicians and surgeons.

On April 13th, 1857, the Legislature of this State admitted the homœopathic profession to all the rights and privileges enjoyed by members of the regular profession under the above mentioned Acts. This provided for the present, and in the Acts incorporating their colleges, exactly the same powers are granted to them as had been granted to our medical schools, which provides for the future. I doubt not there are members of our profession who have hitherto failed to realize the change wrought in the homœopathic profession by the Act of 1857. As before stated, that Act admitted the homœopathic profession to all the rights and privileges as physicians and surgeons under the Acts of 1813 and 1827, and all Acts amendatory thereof, thus they became "legally authorized practising physicians and surgeons," and as such, are entitled to membership of our County Medical Societies. This right is positive, and no County Society has the power to adopt a by-law which will keep them out if they should make application for admission. The right of legally authorized physicians to membership of County Medical Societies has been most definitely settled by our courts, and the proceedings to obtain such rights are well understood by many of our members.

In view of these facts, what should the regular profession do in the matter. Shall we continue to call ourselves "the profession," and neither by public act or private word allow that there is any other? Shall we continue a line of treatment condemned by law and by experience, treatment which only makes homœopathy notorious and ourselves disgraceful; or shall we submit gracefully to the laws of the State, and public opinion, and proffer to the homœopathic profession those amenities which should exist between professional equals? Invite them to their rights in our County Medical Societies, when called by their patrons, attend with them in consultation; when wished by our patients ask them to attend in consultation with us. If they have any superior knowledge in the management of disease or the protection of health, our duty to our patrons requires us to avail ourselves of that knowledge. If we possess the greater professional ability, they and their patrons will find it out. If we hold back from this, we may reasonably be charged with having little confidence in our doctrines. If we go into it; I rest my faith upon "the survival of the fittest."

Buffalo, August 1871. H. R Hopkins, M. D.

Miscellaneous.

Treatment of Capillary Bronchitis in Children by Warm Vapor.

Prof. Abelin, of Stockholm, observes that capillary bronchitis, with its usual sequelæ, collapse, broncho-pneumonia, and emphysema, belongs to the most dangerous diseases of childhood. It most frequently originates in a simple bronchitis which extends from the larger into the smaller bronchia. It is sometimes, however, a primary affection, and attacks with extreme violence children that are apparently in rude health. When primary, it is characterized not only by the intensity, but by the rapidity of its progress. The symptoms resemble more the direct action of poison than a catarrhal inflammatory affection. From the date of occurrence of the first symptoms the patient passes into a state of collapse, the temperature sinks, dyspnœa and cyanosis augment, and ultimately complete anæsthesia supervenes. The course is usually so rapid that the little patient often succumbs in the course of twenty-four hours, and not seldom in from twelve to twenty-four hours. The usual accompaniments of capillary bronchitis, broncho-pneumonia and emphysema, do not appear in such cases to have sufficient time to develop, or at least they are undiscoverable in the dead body. Death, as in croup, results from the rapid progress of asphyxia. After death, only a quantity of secretion is found accumulated in the bronchia, together with much epithelial *debris*, and more or less congestion of the posterior lobes of the lungs. In capillary bronchitis, and especially in the paralytic form, every kind of debilitating treatment should be avoided. Abelin, in the earlier period of practice, adopted antiphlogistic treatment, and rarely saw a child recover. Subsequently, he prescribed tonics and stimulants, (quinine, musk, camphor, turpentine) with better results; but all these remedies were far surpassed in value by the mode of treatment long employed in his hospital, by the respiration of warm vapor, or rather of placing the patient in a hot air bath. The children were placed in a properly constructed small chamber, in which was a vessel of water that was kept boiling day and night. Here the patient was retained for days and even weeks, until complete recovery, which, however usually soon took place. The result of comparison with other modes of treatment was most satisfactory. The percentage of death, which in 1864, amounted to 48, diminished in 1868 to 18. M. Abelin has also found great benefit from breathing the vapor of hot water in pneumonia. Lobular pneumonia may likewise be thus treated, and here, in addition, turpentine embrocations and cataplasms are to be supplied. In lobular pneumonia M. Abelin first gave calomel, or, if diarrhea be present, small doses of calomel with opium or morphia, inf. ipecacuanhæ, with vin. liquiritiæ, thebaicum, and syrup. scillæ, and as soon as the symptoms give way a turpentine emulsion internally and fly blisters externally.—*Journal fur Kinderkrankheilen.—Boston Medical Journal.*

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Pulmonary Phthisis.

BY AUSTIN FLINT, M. D.

(The Medical Record, November 15th,)

At a meeting of the New York Academy of Medicine, on Oct. 20th, Dr. Austin Flint, sen., read an instructive paper on "Recent Views in Relation to Pulmonary Tuberculosis," of which the following is an abstract:—

The questions to be thus considered may be divided into those relating, first, to the tuberculous products, and tuberculization; second, to the causation of pulmonary tuberculosis; and third, to the treatment.

The speaker stated clearly the prominent late views relating to the morbid products which for more than half a century have been called tuberculous, and to tuberculization—these views were from a histological stand-point, and spoke as follows:—

To discuss their merits might seem presumptuous in one who is not a practical histologist. But the great majority of those who are expected either to adopt or reject views founded on histological data are not, and cannot be, workers with the microscope. They cannot be expected to confirm or correct these data by their own observations. They must be content to compare the testimony of different observers, and judge for themselves according to their confidence in the observers. They may be competent, however, to exercise their judgment as to whether the data are sufficient to warrant the views which are thereon based. They may even be better qualified to do this than those who draw deductions from original observations, for experience has shown abundantly that microscopical observations are peculiarly exposed to error from the bias of speculation or preconceived convictions.

With respect to purely histological points, there seems to be, for the most part, agreement among practical histologists. Different microscopical observers do not differ as to the appearances under the microscope. But there is not, as has been seen, the same agreement concerning the conclusions: there is much discrepancy in the interpretation of the appearances. Virchow and the disciples of the "cellular pathology" interpret certain anatomical elements to mean proliferation of normal cells. Robin, Bennett, and others, explain their production by a spontaneous generation. The cheesy metamorphosis, tyrosis, or granulo-fatty degeneration, of which so much has been said of late years, is perhaps inferred rather than proved; it is a mooted point as to the inflammatory or non-inflammatory character of the tuberculous granulations now recognized by many as the only true tubercles. Admitting that the so-called tuberculous infiltration is an inflammatory product, it is not certain that the primary process is an inflammation; at all events, there is room here for doubt and discussion; the relationship between the two products just named is a topic for directly opposite opinions. It is plain that the revelations of the microscope, valuable as they are, have not, as yet, been sufficient to settle these and other pathological questions. Much stress is laid by recent observers on the essential difference between these two products, yet one of the most distinguished of those engaged in the study of tubercle, namely, Villemin, declares that he "thinks" (to quote his own words) "there is ground for returning to the ideas of the great Laennec and the judicious Andral in behalf of the unity of tuberculosis."

It is deemed a highly important object, as a result of late histological researches, to call the affection heretofore known as infiltrated tubercle, a pneumonia. Let it be granted that there is a strict pathological propriety in this, the practical advantage which is gained is not very apparent. The long established points in morbid anatomy which distinguish this affection from other forms of pneumonia remain unchanged. Here is a product which is absorbed with great difficulty, if at all, whereas the intra-vesicular product in ordinary pneumonia is generally, and often rapidly, removed by absorption. The former leads to abscesses, and to cavities which very rarely cicatrize; the latter seldom ends in abscesses, and when they occur the cavities resulting from them tend to cicatrization. The tuberculous pneumonia is a bilateral affection, the instances in which it is confined to one lung being rare exceptions to the rule; the reverse of ordinary pneumonia. On the other hand, contrast the tuberculous pneumonia with the chronic form in which the morbid product is interstitial, and these points of difference are not less striking. If it be resolved to call the affection a pneumonia, some qualifying term, denoting its distinctness of character, is certainly important. The word *cheesy*, or the more refined synonym *caseous*, is objectionable on the ground that for it to have any precision, the age and the kind of cheese to which it is analogous should be stated. The name "chronic catarrhal pneumonia" must derive its significance chiefly from the supposition that the pneumonia supervenes upon a bronchitis, which is a supposition, to say the least of it. Tuberculous pneumonia seems the most appropriate term. The term is objected to on the ground that the affection is not always, although often, associated with true tubercles, that is, the gray granulations. To call a pneumonia without tubercles, tuberculous, would, of course, be a misnomer. The objection is a valid one only in view of the hypothesis that tubercles or granulations are consecutive to, and dependent upon, the pneumonia; the latter, accordingly, existing for a time without, and in some cases not followed by the former. Niemeyer carries this hypothesis so far as to say that "the greatest danger for the majority of pneumonia's is, *they are apt to become tuberculous*" —a curious statement when it is considered that, assuming the correctness of the hypothesis, to determine whether the pneumonia be or be not associated with tubercles, is confessedly rarely within the grasp of diagnosis. As a concluding remark, in connection with this division of the subject, the distinctions and names which have lately been introduced can hardly be said to simplify our knowledge of tuberculous disease. I will content myself, in illustration of this remark, with citing the nosological divisions in the late treatise on Pulmonary Phthisis by Hèrard and Cornil, a work of labor and ability, and containing muca valuable information.

These authors treat of the following forms of disease as entering into the study of pulmonary phthisis :—

1st. Lobar tuberculous pneumonia; 2d. Lobular tuberculous pneumonia; 3d. Generalized granular phthisis; 4th. Generalized granular phthisis, with pneumonia; 5th. Partial granular phthisis; 6th, Acute or galloping phthisis; 7th. Generalized caseous lobar pneumonia. Into these seven varieties are resolved the chronic and acute phthisis of other authors.

The Causation of Pulmonary Tuberculosis.—The discovery by Villemin of the inoculability of tubercle stands out in strong relief among the conflicting and perplexing views which have been noticed. The inoculability of tubercle is a positive indubitable fact, which not unlikely will constitute a highly important epoch in the history of tuberculous disease. Connected with this discovery are certain questions not as yet settled. The specific character of tuberculosis is one of these. In other words, does the matter inoculated, when the disease is thus communicated, contain a special virus? Villemin claims that his experiments prove the affirmative to this question, and establish for tuberculous disease a specific character such as belongs to variola, scarlatina, syphilis, and glanders. His work on tuberculous phthisis is a masterly effort to show this by collateral evidence, as well as by the experiments establishing the inoculability of the disease. On the other hand, Lebert, Wryss, Waldenburg, in Germany; Colin, in France, and Andrew Clarke, Simon, Sanderson, and Wilson Fox, in England, have made experiments which appear to show that inoculation with other than tuberculous products (using this term in its widest sense) is sometimes followed by the development of tubercles in the lungs and different organs. Villemin claims that in these experiments either the products furnishing the matter for inoculation contained the tuberculous virus, or the products following the inoculation were not true tubercles. The settlement of this point by continued researches is evidently of much importance in its bearing on the question as to the specific character of the disease.

From the fact of inoculability springs another question, which needs only be stated for its practical importance to be sufficiently obvious. Inoculation proves contagiousness in the strict and proper adaptation of the latter term; but is not the disease communicable by infection? This is the question now referred to. May not material emanations from tuberculous patients be received into the air-passages, and the disease in this way produced? Contagion does not prove infection—a fact of which syphilis in an exemplification--but taking into view morbid emanations which must be contained in the expired breath of patients affected with tuberculous disease, the possibility, if not probability, of its being sometimes thus communicated becomes an important point for renewed clinical study. And, pending the accumulation and investigation of facts, it is certainly a wise precaution to enjoin upon healthy persons, and those already tuberculous, to avoid, as far as practicable, an atmosphere which, from defective ventilation or the congregation of phthisical patients, or both, must abound in the suspected emanations.

From the time of Laennec a tuberculous diathesis had been supposed to be largely involved in the causation of pulmonary tuberculosis; but, according the views of some distinguished writers of the present day, this diathetic agency has been greatly overestimated. Villemin repudiates altogether the existence of a diathesis which is independent of the introduction within the system of a special virus. Others, for example Niemeyer, while they do not ignore a constitutional predisposition, think that its causative influence is vastly less than has been supposed, and that a proportionately greater agency is exerted by local exciting causes. The advocates of this view consider that an active, special diathesis does not exist, but only a certain amount of vulnerability (to use a word of recent application) arising from an enfeebled power of resistance to the local causes of disease. This view, in fact, almost does away with a diathetic influence, since the term diathesis denotes a predisposition to a particular form of disease. It has been hitherto believed that tuberculous disease is developed chiefly, and sometimes even exclusively, as a result of a special, determining, constitutional, morbid condition. This is the idea attached to the term tuberculous diathesis. Local exciting causes have been regarded as of secondary importance, being never, in themselves, sufficient to produce the disease, and not being included in the causation. Here are questions of great practical importance. The teachings of Niemeyer are in strong contrast with the views which have been, and are still, generally held by physicians; and it is needless to call attention to their direct and important bearing on treatment.

These views are to be sustained, or otherwise, not by arguments, but by evidence derived from clinical experience. Is it true that tuberculous infiltration, or pneumonia, as determined by physical signs, is preceded generally or frequently by bronchitis? The answer to this question in the negative purports to be based on clinical facts. So far as one can judge from publications, the affimative, if not merely a speculative or rational conclusion, is supported, as yet, only by the impressions formed on a limited experience.

The latter answer is a revival of an old belief which has never been eliminated from the popular mind. If the question is to be settled anew, this can only be done fairly by a fresh appeal to clinical observation. It is practicable to settle the question in that way. The existence or non-existence of bronchitis, or a bronchial catarrh, antecedently to the presence of signs denoting tuberculous solidification of lung, is a point which, if the opportunity be offered, a competent clinical observer can determine in individual cases. Until the question is settled, let us not accept the new view because it is affirmed, or because it is thought to harmonize with other views.

The remarks just made are alike applicable to the question whether hæmoptysis stands in a causative relation to tuberculous disease. The affirmation of such a relation, no matter by whom made, and the reasonableness of it, or its consistency with other views, are of no moment except in so far as they are sustained by clinical evidence. The question is to be settled by determining whether hæmoptysis, occurring when tuberculous disease does not exist, is followed by this disease in a proportion of cases sufficiently large to show a relation of causation. Clinical observation is competent to determine this point, and, until this is done, it is the part of prudence and philosophy to hold the mind in abeyance with regard to the adoption of this, as of the other of the views just stated.

The Treatment of Pulmonary Tuberculosis.—Within the recollection of the older physicians of the present day, the treatment of pulmonary tuberculosis has undergone an entire change. The measures in vogue thirty or forty years ago were those which have been known as antiphlogistic, namely, venesection, aed local blood-letting, mercurialization, and active counter-irritation. With these were conjoined a restricted diet and confinement within doors.

Impartial observers who are able to compare the success of treatment then and now, must bear testimony to a great improvement. The proportion of recoveries is certainly much greater. When recovery does not take place, the disease is much oftener non-progressive, and, when not stationary, its progress is more slow. Death is not so often preceded by a long period of confinement to the bed and suffering from extreme debility and bed-sores.

In these respects the contrast is very striking, and it is fair to attribute it to the change in treatment. Of late years the so-called antiphlogistic measures have fallen into disuse; and, in place of these, tonic remedies and alcoholic stimulants have been much employed, together with cod-liver oil, a generous diet, and life out of doors.

It is not easy to determine how far the improvement in the success of treatment is due to the abandonment of measures formerly employed, and how far to those which have been substituted, but that the former were injurious can hardly be doubted. Of the measures now in vogue, there may be differences of opinion with reference to the relative importance of those which are, in the strict sense of the term, therapeutical, and those which come under the head of diet and regimen ; but I think few are to be found who do not regard the latter as vastly more important than the former. It is by no means uncommon for cases to be treated exclusively by hygienic measures.

Now, it is proposed to return to some of the measures which had become most obsolete in practice.

In the recent treatises by Hèrard and Cornil, and by Niemeyer. bloodletting is advocated as a measure important in certain cases of the common form of pulmonary tuberculosis, namely, that known as infiltrated tubercle. In the first named of these two treatises, even venesection is recommended, and in the second, local bleeding by cups or leeches. Hèrard and Cornil advocate the use of the tartrate of antimony. They advise confinement within doors during the winter season. Niemeyer goes further, and advises confinement to the bed whenever febrile phenomena are present. These measures of treatment are based on the pathological view which considers infiltrated tubercle as a form of pneumonia; they are employed in other words, as antiphlogistic measures. Hèrard and Cornil state that the therapeutical indications are nearly the same as in cases of frank pneumonia; and Niemeyer states as a reason for giving to the affection the name "chronic catarrhal pneumonia," that thereby "its prophylaxis and therapeusis are promoted."

This new view of the treatment of pulmonary tuberculosis seems to me to illustrate the tendency to engraft therapeutics on pathology. The disease, as it is generally presented in practice, is a pneumonia, and it therefore claims the treatment which is supposed to be appropriate to pneumonic inflammation.

But this is a *non sequitur,* according to the general truth stated in entering on this division of the subject. It does not follow that these measures are indicated, granting that the affection is a form of pneumonia. The only true basis of therapeutics here, as elsewhere, is in clinical experience. Has clinical observation been correct in leading to the conclusion that these measures of treatment are injudicious, at a time when tuberculization was generally thought to be a non-inflammatory process? then, assuredly, this conclusion is not upset by proving that the process is an inflammation. The lessons of experience are not to be subverted by changing the name tuberculous infiltration to catarrhal or tuberculous pneumonia.

It is not, then, an unreasonable scepticism, or conservatism, to protest against the adoption of this new view of treatment on mere pathological grounds. We are bound, as it seems to me, not to adopt it until it is substantiated by a collection of facts obtained by experimental observation. We are bound to adopt it whenever it is so substantiated. They who are fairly convinced of the propriety of these measures, as the result of speculation or reasoning will not be likely to hesitate in employing them; but there are many who cannot at present conscientiously submit them to the test of experimentation.

The pathological opinion stated under the head of causation (and which I believe may be proved to be erroneous), that pulmonary consumption is a sequel of bronchitis, has an important bearing on the treatment. If this opinion be correct, it is a rational inference that it is a special object of treatment to prevent the recurrence of attacks of bronchitis, and that therapeutical measures are to be specially directed to bronchial inflammation. Of those who have had a large experience in the management of the disease in this country, not a few attach most importance to out-of-door life, and enjoin upon patients not to be deterred from carrying out this hygienic measure by apprehensions of "taking cold." It is common to assure patients that the existence of pulmonary tubercles does not render them more liable to attacks of bronchitis, and, if attacks occur, the tuberculous affection is not thereby increased. These statements, which date from the researches of Laennec and Louis, are not in accordance with popular belief, a fact which Niemeyer thinks is very fortunate, considering, as he does, the latter to be the more correct view. This view, there is reason to believe, is based on the supposed causative connection between bronchitis and consumption, rather than on clinical experience.—*Half-Yearly Abstract.*

On the Use of Opium, Bromide of Potassium, and Cannabis Indicum in Insanity,

ESPECIALLY IN REGARD TO THE EFFECTS OF THE TWO LATTER GIVEN TOGETHER.

By Dr. T. S. CLOUSTON, Medical Superintendent of the Cumberland and Westmoreland Asylum, Carlysle.

[Dr. Clouston states that he has given bromide of potassium alone, or in conjunction with Indian hemp, in fifty-one cases of various kinds of insanity. In all of these cases the drugs had a fair trial, for a sufficient length of time. Very good results were obtained in a considerable number of cases.]

If to a patient whom one has known to have regular attacks of periodic mania for years, we give a medicine at the commencement of an attack, and the patient's excitement ceases, contrary to anything known in the history of the case before, then I think we may fairly conclude that the medicine and the absence of mania are cause and effect. If in a case of mild melancholia at the change of life in a woman, the disorder has existed for a year and a half, if most of the remedies ever before recommended for that class of cases had been tried and failed to do good, and if at last the bromide of potassium procures sound sleep, and immediate visible improvement in appetite, weight, and mental state, surely some credit may be given to it. But if in this same woman its use is intermitted, and all the symptoms at once return, and again immediate improvement follows its employment, so that the patient becomes able to employ herself as she never did before since her illness, and through healthy employment gains in flesh and strength, and gets quite as well in three months as ever she was in her life, surely we cannot deny to therapeutics a cure in the best sense of the term.

Or if a cure cannot be expected, as in a case of general paralysis, if a mixture of bromide of potassium and Indian hemp so subdues intense excitement, that when not taking this medicine the patient is noisy, violent, destructive, sleepless, and rapidly losing weight, and when taking it he is quiet, semi-rational, dresses and eats properly, and remains in this state six weeks, till the disease in its natural course passes into its quiet stage, I think here we have a palliative of great value and importance. Or if an old lady gets irrational, restless, sleepless, and unmanageable by her relatives, and if apparently the last alternative to sending her to an asylum has been tried and failed, until half-drachm doses of bromide of potassium and tincture of Indian hemp is found to subdue and quiet this irritability and restlessness, so that she can be kept quite well at home, for the month or two during which the excitement lasts, and until the ordinary dotage of old age to which this excitement was a prelude, comes on, surely the physician's power was augmented, and the patient was unquestionably the better for the remedy he employed.

In acute mania I seldom found the bromide given alone to do any good, or, indeed, have any perceptible effect. I gave it in all doses up to 120 grains three times a day, and I continued its use in some cases for a few days. But when combined with tincture of cannabis Indica the effects of the mixture were in many cases very remarkable. Sometimes if the excitement was very intense I began with drachm doses of each three times a day, or, in some cases, every three hours for the first day. In the cases in which the effects were good, they usually appeared by the end of the first day of its use. The patients become less restless, the shouting and violence were abated, and at night they slept. The skin, too, which is so often dry in acutely excited patients became more moist, and they perspired freely. The pulse usually lost in force. Indeed, this is the only objection I have to this mixture, that the force of the heart's action is undoubtedly lessened in most cases by it. But I have never seen a single case of syncope, except in one woman who fainted two hours after a dose, but soon recovered. The lessened force of the heart was shown, too, by the paleness of the face and skin generally. After the medicine has calmed the excitement the patient remains confused in mind. The intelligence and coherence of ideas, of course, do not usually return for some time. It is often sufficient if one or two doses per diem are given after the first day or two, and I have stopped its use altogether at that time—the patient remaining free from acute excitement. The greatest advantage of this sedative over every other that I have tried in acute mania was, that these patients took their food as well or better during its use as without it. Every one who has acute mania to treat knows that there are three great risks. The patient's appetite may fail, the excitement may cause complete exhaustion or death, or it may last so long that the power of the brain to become the medium of normal mental manifestations seems to be lost or impaired, and dementia results. There can be no doubt that the patients being got to take a large amount of nourishing food and stimulants is of the very first importance in all cases of acute mania, and it is the great risk of taking away the patients appetite that prevents opium or henbane being more extensively used. Especially is the risk great if we give large doses of opium. It seems to me that the bromide and Indian hemp combined approached more nearly by far than any other drug to our great desideratum in treating acute excitement of the brain, viz., a medicine that will so alter or modify the morbid functions of the brain, that the patient will cease to exhaust all his bodily energy in muscular movement and constant wakefulness, and will at the same time allow the reparative effects of rest and food to act quickly in restoring the normal nutrition of the cerebrum. In some cases complete recovery of the mental powers took place very soon indeed after the excitement was subdued; in others, the confused and incoherent state remained for a long time.

[Dr. Clouston concludes with the following summary :—]

A mixture of one drachm of bromide of potassium with one drachm of the tincture of cannabis Indica is more powerful to allay excitement than any of the other drugs or stimulants tried. It is more uniform and certain in its effects, more lasting, interferes less with the appetite; and to produce the same effect the dose does not require to be increased after long continued use.

Single doses of opium tended to raise the temperature and to lower the pulse; single doses of the mixture above-mentioned to lower the temperature and quicken and weaken the pulse, of bromide of potassium alone to raise the temperature and lower the pulse, of cannabis Indica alone to raise the temperature and quicken the pulse, of whiskey to lower the temperature very much and slightly to quicken the pulse, and of beef tea to lower the temperature in the least degree and to lower and strengthen the pulse.

By giving bromide of potassium and cannabis Indica together. not only is the effect of either given separately immensely increased, but the combination has an essentially different action from either of them given alone.

Bromide of potassium alone can subdue the most violent maniacal excitement, but only when given in immense and dangerous quantities, and its effects are so cumulative while so given, that after they have once begun to appear they increase for days after the medicine has been stopped, almost paralysing the cerebrum and sympathetic.

To produce sleep in mild excitement, one drachm of the bromide of potassium is about equal to half a drachm of laudanum. To allay maniacal excitement, forty-five grains of the bromide and forty-five minims of the tincture cannabis are rather more than equivalent to a drachm of laudanum.

Seven cases of chronic mania were treated for twelve weeks with opium, in doses rising gradually from twenty-five minims of the tincture up to ninety minims three times a day, and the results noted. After getting no medicine for several months the same cases were treated with a mixture of bromide of potassium and cannabis Indica in gradually increasing doses, and the results noted and compared with those of the opium treatment.

Under the opium treatment the patients all lost in weight continuously; their morning temperature was lowered and also their evening temperature, but the latter (which was too high, and its being high was a bad sign) very slightly, and their pulse was decreased in frequency. The opium allayed the excitement in the larger doses, but it soon lost its effect.

Under the bromide of potassium and cannabis Indica treatment the patients only lost in weight very slightly for the first six weeks, and after that they gained, their weight being more at the end of eight months' treatmant than it was to begin with. Their appetites were not interfered with. Their temperature fell, especially their evening temperature, and the pulse was slightly increased in frequency and weakened in force, while the excitement was subdued, and the medicine showed no signs of losing its effect, even after being thus used for eight months. The maximum of good effects and the minimum of the ill effects of a sedative drug were thus obtained by using the bromide of potassium and the cannabis Indica in combination.

The bromide of potassium alone may be continued for months in doses of half a drachm three times a day, and the patients gain in weight and remain healthy in body.

Cannabis Indica being a diuretic, and the bromide of potassium being carried off by the kidneys, it is probable that the former in that way helps to prevent the cumulative action of the latter when given alone.

When the two are given together, the first symptoms developed are those of the cannabis Indica, but these soon merge into a state of drowsy calmness of the nervous system which is in all respects the opposite of nervous irritability.

Fifty-one cases of various forms of insanity were treated by bromide of potassium alone or along with Indian hemp, and the results were that eighty per cent of these were benefitted more or less in some way, and twenty-five per cent. were most decidedly benefitted.

The milder cases of puerperal and climacteric insanity were sometimes remarkably benefitted by drachm doses of the bromide of potassium given at night.

In some of the cases of acute mania the excitement was subdued in a few days by the bromide combined with Indian hemp in doses of from half a drachm to a drachm of each given three times a day.

In some cases of periodic mania and general paralysis all the worst symptoms of maniacal excitement were allayed by giving a mixture of bromide of potassium and cannabis Indica in doses of from half a drachm to a drachm and a half of each three times a day. This was continued in one case for nine months with the best effect.

In three cases of periodic mania, attacks were cut short by a mixture of the two medicines, or by the bromide alone. In one of these complete recovery followed.

Fewer cases of simple melancholia were benefitted by the bromide alone or along with Indian hemp than any other form of insanity. Some were made worse by them, but in one case of this disease where there was great excitement and hallucination of hearing and suspected organic disease of the brain, the combination gave immediate and complete relief of all the symptoms for four months.

One case of senile mania was successfully treated at home by a mixture of the bromide of potassium and tincture of cannabis Indica, when she was to have been sent to an asylum. It seems probable that some such cases, and also patients with short attacks of mania might be treated by the same medicines at home, when at present they have to be sent to lunatic asylums, on account of the want of such a safe and powerful sedative.—*Brit. and For. Med.-Chir. Review.—Braithwaite's Retrospect.*

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On Cold Bathing in Typhoid Fever.

By DR. FEHRSEN.

(The Lancet, December 31st, 1870.)

Dr. Fehrsen, dating from Dresden, states that he has recently visited the military hospitals, and seen the numerous cases of typhoid fever brought from the seat of war in France. The type now raging among the French and Prussian troops is the typhus abdominalis of the Germans, or what is here known as typhoid or intestinal fever.

The fever cases are indiscriminately mixed with the wounded, and those suffering from dysentery. Many of these are removed to Dresden, and it was determined to try cold bathing. The mode adopted was, that as soon as possible after admission into the hospital, the temperature of the patient was ascertained. If the thermometer showed 104° Fahr., he was put for fifteen minutes into a bath of 59° Fahr., up to the neck; in cases of much headache or delirium, an additional quantity of cold water was poured over the head, or cold compresses were applied. A measurement, three-quarters of an hour afterwards, uniformly showed a fall of two or three degrees. The cold bath was repeated during the first week from four to six times a day, or as often as the temperature attained to 102° or 103° Fahr., experience having shown that the rapid cooling down of the febrile heat to a normal temperature is a powerful means of mitigating the symptoms, shortening the duration of the disease, and favoring an early convalescene, besides obviating the necessity of prolonged bathing at a later period of the disease.

The most striking benefits derived from this cold bathing are—firstly, that the delirium is generally mild or easily subdued; secondly, an earlier return of sleep; thirdly, a total absence of bedsores; fourthly, a less prostrate state of the system when the patient leaves the hospital. Women, being more manageable, bathe more willingly than men. Many cry or give way to moaning for a few minutes, until, by a little courage and lying quite still, the body gets accustomed to the cold. If the water, however, be in any way disturbed, immediately they commence moaning and crying, showing, probably, that the stratum of water in immediate contact with the body must have acquired a higher temperature from the evolution of the febrile heat. After the first bath the sick show less objection to its repetition, and some even like it. Dr. Fehrsen saw about two hundred cases thus treated. Nothing contraindicates the use of the bath except very feeble action of the heart, hemorrhages, or perforation of the bowels, nor is a little bronchitis considered as an obstacle. The lightest food, with very little claret, is all that is given. Quinine is administered for the express purpose of lowering the febrile heat, sixteen grains being given in two divided doses in the evening. The statistics of the Stadt-Krankenhaus, at the present time, contrast most favorably with those of a few years ago, when the mortality averaged 11¾ per cent., as at present it does not exceed 4 per cent.—*Half-Yearly Abstract.*

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Indian Cholera Statistics.*

By S. C. Townshend, M. D., Sanitary Commissioner, Nagpore.

Dr. Townshend arrives at the following conclusions from the documentary evidence in the body of his report:—

1. That for the production of cholera two conditions are necessary—the presence of a special contagion, and a susceptibility to its influence on the part of the person to whom the contagion is applied.

2. That with respect to the origin of the epidemic of 1868, the evidence is in favor of the contagion having been brought from elsewhere, rather than that it was generated in the localities where the disease first broke out.

3. That the subsequent diffusion of the contagion was effected solely by means of human intercourse.

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* Report on the Cholera Epidemic of 1868. in the Central Provinces. Folio, pp. 85. 1869.

4. That a high temperature and extreme dryness are no obstacles to the diffusion of the contagion.

5. That with respect to the general population of the country the imbibition of water containing animal organic impurities is the most common means by which personal susceptibility to the effects of the contagion is induced.—*Half-Yearly Abstract.*

Chloralum.

Dr. Edward Ballard, Medical Officer of Health for Islington (*Chemical News*, January 20, 1871), protests against the assertion made by Professor Gamgee, that carbolic acid, owing to its smell, is less used than it would be if without odor, and recommends caution in accepting chloralum as a disinfectant. In his own experience he has found carbolic acid "a most efficient agent for destroying contagia," and that its odor is not offensive unless contaminated with sulphide of ammonium.

He objects to the inference that because chloralum is *antiseptic* it is also *disinfectant*, and to Professor Gamgee's assuming its disinfecting power from its chemical properties as an antiseptic. A disinfectant, he says, is an agent which will destroy the vitality—the power of growth and reproduction—of most minute particles of matter which, given off by the sick, are capable of producing a like disease in the healthy. He thinks that to prove that any substance is a disinfectant, it should be shown by experiment, by an accomplished microscopist, to have the power of destroying the vital manifestations of those minute amœbiform particles of matter which constitute the simplest form of living things, and by repeated experiment upon a large scale, that the repeated use of the disinfectant has actually resulted in the arrest and spread of contagious disease. He is of the opinion that Prof. Gamgee has advanced nothing to satisfy any one that chloralum, used in any way, is capable of destroying the peculiar manifestations of a morbid contagion, and thinks that the reason for its rapid strides into the favor of medical men (who are apt to take up new disinfectants in a "wild manner") may be found in that freedom from odor which Prof. Gamgee considers the basis on which the reputation of Condy's fluids rest.

Dr. Ballard gives as a reason for not having the chloralum himself, though small-pox and scarlet fever are raging in his district, that he dare not assume the responsibility of its use until *prima facie* proof at least is afforded him that by using it he will be using that which is capable of destroying "disease-germs."

In the same journal (January 27, 1871), Prof. Gamgee expresses his high appreciation of the value of the suggestions made by Dr. Ballard with regard to means for investigating and proving the mode of action of substances offered as disinfectants, but thinks that little would be learned experimentally about any of them if all persons who, like Dr. Ballard, have abundant opportunity of testing the matter, waited instead of acting.

He states that chloralum shrivels, arrests the movements of, and kills the amœbiform bodies referred to,—and does more, it destroys many of the lower forms of parisitic life, whether animal or vegetable. He is convinced that every good antiseptic is really a destroyer of disease. He adds that the properties of chloralum are almost identical with the active antiseptic and disinfectant properties of hydrochloric acid.—*New Remedies.*

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Editorial Department.

The "Standard of Medical Education."

The "Medical Education" hobby upon which a great many medical editors have written so freely, for years past, and upon which the time of Medical Associations and ambitious medical men has been so largely expended, is not yet devoid of practical living interest. We have never indulged our fancy in portraying the glorious altitude that the profession will hereafter occupy when its "Educational Standard is fully raised," but have engaged ourselves mainly in studying means for elevating it. This editorial will be very short, and is designed only to suggest what appears to us as the more practical method of elevating the profession. It seems that writers and orators have universally, and almost without exception, regarded the curriculum of the College course as the "Standard of Medical Education" which it was so desirable to have raised, and this is the view which we want to correct. Medical education, is commenced, it is true, at the College; here, is laid the foundation upon which can, in after life be raised a superstructure which is the true "standard." However perfectly this foundation is laid, if it is regarded as the standard of medical education, how fatal is the mistake. Physicians who think that the standard is raised at graduation, (and this seems the general impression) generally cease labor, and it actually becomes their standard. Whoever is quite familiar with the customs and habits of young graduates in medicine, has learned that it is not always the easiest to learn or the most ready to observe, or even those of highest mental culture and greatest attainment, who build the highest standards of medical knowledge; the after habits of life determine the question in much greater degree. Some one in the medical world has written learnedly upon this subject, and suggested that where a man was graduated might indicate how well he was educated, and that the initial letters of his *Alma mater* might properly be added to the general title.

The medical knowledge of a physician is but very partially obtained during his college course, so small a part of it is gained during the years of his pupilage that it may truthfully be said that he has only learned how to commence his search for medical knowledge. The foundation stones are laid, but the "elevation" remains for after life. It is idle to talk very much more upon the general proposition that to elevate the professional standard we must depend upon the medical schools of the country alone, to do the work. We are among the very last to oppose any efforts which the schools may make, or pretend to make, for more thorough training; the pretence, even, may be productive of some good, however destitute of reality it may prove; but we, at the same would remind the medical public, how little available knowledge of disease is really gained during pupilage, diverting if possible, attention from medical schools as alone the common source of all our faults.

Our primary and professional course of study is of the greatest importance, and cannot be too highly appreciated in making up the character and influencing professional standing and life. But if our schools required as preliminary, graduation in Literary and Scientific schools, and then extend their own terms to as many months and to as many years as they please, they could never graduate a creditable *alumnus*, if he was made to believe that his education was complete and that his *alma mater* had actually "raised his standard" of medical education. The medical men of our country, those who have taken places in actual service, are the ones who can raise our professional standard. Our colleges can do something, and I believe have done much, very much, in this great reform. To their organization and successful working are we indebted for rapid progress in our professional knowledge, but it is not for them alone to raise our standards. The most stupid graduates of our colleges have often gained attainments and position, so as to far outrival the more educated and thoroughly qualified. Three or four years only commences our education; its standard is not measured by it, its completion is not even faithfully foreshadowed by it. Let those who expect so much in one direction, turn their attention to other and more potential causes of our low standards. The idea that graduation means complete education, and that nothing remains but to use their already acquired knowledge when urgent necessity requires, is one of the main reasons why our professional status is so low; while this remains it will always be low.

The popular demand for high standard of medical knowledge is not sufficiently obvious. The public mind is either not capable of appreciating it, or has never been educated to rightly estimate its value, still, we believe, that finally physicians are estimated by the public at about what they are worth.

Who has ever written or said a word about elevating medical education but has commenced and ended with what educational institutions do, or do not do? This has been carried so far that physicians regard themselves as exempt from the necessity of personal effort, and wonder that the standard of medical education is so low—think it very strange that our medical colleges do not raise it up. It is right that the profession require somewhat of the medical colleges; it is equally just that the colleges require somewhat also of the profession; "a poor rule that don't work both ways." We shall always have in our profession men of all grades of attainments, the same that will prevail in other professions and callings. We shall continue to graduate as formerly, classes of students of varied capacities and attainments, some will continue to add to their acquirements year by year, during life, and thus in time will become educated physicians. Some will graduate and grow to know less and less if possible, and some will stand still; the most giganantic failure of all being observed in those who have graduated with credit, but with the impression that medical education is obtained in college, and are not made to understand that twenty years or more of constant faithful study, is indispensable to high standard of medical knowledge.

MORAL.—Every doctor must raise his own standard of education.

Ovariotomy by Enucleation, without Clamp Ligature or Cautery, and without Hemorrhage.

We are much gratified to see that not only the profession in our own country, but also in Europe, are following our suggestion in the treatment of the pedicle in ovariotomy, and that our observations as to the feasibility and safety of the procedure are being sustained by distinguished operators abroad. Our first case has been published about three years; since that time our own obsevations, and the experiments of our friends fully confirm our first impression, founded upon a single case. A proposition so new, and at first thought, so hazardous, could not be rapidly accepted. Every surgeon who has operated frequently, has seen the large throbbing arteries at the base of ovarian pedicle, and they can scarcely believe that tracing up the vessels with their loose cellular surroundings they will so soon arrive at the final termination, where the vessels enter the cyst, (if at all), only of capillary size. Richard H. Meade, Esq., Consulting Surgeon to the Bradford Infirmary, England, thus speaks upon the subject.—

> "The patient being under the influence of chloroform, I made an incision about four inches long in the lower part of the linea alba; carefully opened the peritoneum; and evacuated nearly two gallons of ascitic fluid. On enlarging the opening in the peritoneum to the same extent as the external wound, the ovarian tumor at once came into view. I now directed an assistant to compress the abdominal walls with his hands, one placed on each side, so as to compress the edges of the wound backwards; while I endeavored with my hands to draw the tumor partially through the opening. In doing this, the walls of several of the small cysts of which the tumor was principally composed, (being very thin) were ruptured by the pressure of my fingers; and a considerable quantity of thick brown fluid, like dark-colored linseed tea, escaped. The edges of the wound were so well compressed that none of this ovarian fluid was allowed to enter the peritoneal cavity. The tumor was now found to be firmly adherent to the free extremity of the great omentum; these adhesions were carefully and slowly torn through, and the whole mass was

then easily drawn through the wound. It was now found to contain a good deal of heavy solid matter; and, on turning it over to examine its attachments the pedicle, which was small and thin, to my dismay and annoyance at the time, gave way, and the tumor tore itself loose from its connexions. Fearing hemorrhage, I kept hold of the remains of the pedicle, but very little bleeding followed; and I could find no vessel requiring ligature.

"It is difficult to account for the large quantity of ascitic fluid which was met with, unless there were some secondary deposits of cancerous matter on the peritoneum; but the history of the case would hardly lead to that supposition. The presence of a considerable amount of serous effusion in the peritoneal cavity has, however, one advantage in cases of ovariotomy; it seems to render the membrane less liable to take on acute inflammation, its delicate secreting surface having undergone some change, and after the removal of the ovarian disease it does not seem to be resecreted.

"In some of the medical journals a case of ovariotomy has been reported (extracted from an American periodical), in which Dr. Julius F. Miner removed a very large ovarian tumor by enucleation, without either clamp, ligature, or cautery, and without hemorrhage. When I commenced the above operation I had no idea of imitating his proceeding, but when the tumor (to my horror at the time) enucleated itself, and there appeared to be no bleeding from the pedicle, I determined to follow his example, and leave the torn surface unsecured; thinking that the risk from hemorrhage was less than that from inflammation from the presence of a foreign body in the peritoneal cavity. My case turned out successfully, and I think I should venture to repeat the proceeding in some special cases; for instance, where the pedicle does not appear to be vascular, when the attempt might be made to tear the tumor gently from its connexions (in the same way as adhesions are generally separated); but a firm hold should be kept of the pedicle, so that it might easily be secured in case of bleeding —*British Medical Journal.—Braithwaite's Retrospect, for July*, 1871.

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Books Review.

Insanity: Its Dependence on Physical Disease. By JOHN P. GRAY, M. D.

This is a paper read before the Medical Society of the State of New York, at its Annual Meeting, February, 1871. The author first considers the causes of insanity, and shows by plainest reasoning and by abundant facts, that insanity has its origin in a large majority of instances at least in functional or organic change of the brain. He says, page 24, "The true and only method by which insanity can be studied is that followed in all other diseases. The physical lesions are the subjects of primary importance. These must be studied through physiology and pathology. The mental manifestations are here secondary and dependent. "Organs and tissues," says Dr. Gull, "have each their own life, and correlative with it, their own tendencies to disease, and their specific power and mode of repair," and "the purpose of our study is to trace these tendencies to their source on the one hand, and to their effects on the other."

"We say that insanity is a bodily disorder; that it is a disease of the brain. This does not imply that there is something to be thrown off, in the character of some morbid entity. It simply means that certain changes have taken place in the brain, or its investing membranes, which imply a departure from a healthy physiological action, and that in consequence of these changes there is more or less prolonged disturbance of the mind."

The paper is a very instructive one, and will do much towards correcting popular and professional error upon the subject of the causes and nature of insanity.

Byford on the Uterus. A treatise on Chronic Inflammation and Displacements of the Unimpregnated Uterus. Second edition, enlarged with numerous Illustrations.

It is but a few months since we had the opportunity to notice the appearance of the first edition of this work, and feel gratified that the merit of the book should have been so well appreciated by the profession as to have a second edition so soon called for. There is no occasion for our going into any detailed account of the teachings of the work; it will be quite sufficient for our readers when we announce that the second edition has made its appearance. The chapters are upon such subjects as the following, viz:—" Symphatic accompaniments of Uterine diseases; Local Symptoms; Etiology; Prognosis; Complications of Inflammation of Cervix; Position of Inflammation; Progress and Termination; Diagnosis; General Treatment; Local Treatment; Nitrate of Silver and its substitutes; Treatment of sub-mucous Inflammation; Displacements, their Philosophy and Treatment.

These and kindred subjects are discussed in a masterly manner, without any show of superior knowledge or pretension as a discoverer. Dr. Byford writes the exact present state of medical knowledge on the subjects presented, and does this so clearly, so concisely, so truthfully and so completely, that his book on the uterus will always meet the approval of the profession, and be everywhere regarded as a popular standard work.

The Physiological action and Therapeutic Use of Chloral. By J. B. ANDREWS, M. D.

Dr. Andrews presents in this pamphlet, which is a reprint from the American Journal of Insanity, the results of his experimental investigations of the effect of Chloral upon the circulation by means of the sphymograph, the tracings of which are illustrated. From these experiments, he concludes, in regard to the physiological action, " 1st. That the effect of chloral is to reduce the number of pulsations. 2d. That the primary action is to increase the force of the heart's action and arterial tension. 3d. That in large doses, within safe limits, the pulsations are not reduced in number proportionately to the size of the dose; but the effect is more prolonged. That the secondary effect is to diminish the force of the heart's action and the arterial tension."

Amputation of Redundant Scrotum in the treatment of Varicocele. By M. H. HENRY, M. D.

In this pamphlet, a new instrument for the operation above named is recommended and described by the author. The instrument, called Scro[illegible]a-Forceps, may prove to be of service to the surgeon, but we shall be better prepared to appreciate it after trial.

Modern operation for Cataract. By HASKET DERBY, M. D.

This is the title of a very able lecture delivered by the author at the Harvard Medical School. It is claimed that the "peripheric linear extraction" as advocated by Von Graefe, is the most successful, both to the surgeon and patient.

Bossange's Catalogue of Anatomy.

This Catalogue contains a complete list of illustrative preparations of a complete course of internal and external pathology of and descriptive anatomy and surgery.

The Student's Chart of the Sympathetic Nerve. By RALPH M. TOWNSEND, M. D., Assistant Demonstator of Anatomy in the Jefferson Medical College.

This is a convenient hand map, giving a good general idea of the distribution and relations of the different branches of the sympathetic nerve. To distinguish the different nerves, the author has colored the motar nerves blue, the sympathetic yellow, and the sensory red. We should think it very useful to the student.

Twenty-Eighth Annual Report of the Managers of the State Lunatic Asylum.

According to this interesting reports, much has been done during the past year to advance the pathological investigations of the cause of insanity, and Dr. E. R. HUN has been appointed special pathologist. The plan proposed by Dr. J. P. Gray, upon which the investigations are conducted, is as follows:

FIRST. The examination of secretions in all stages of the disease.

SECOND. The pulse under the sphygmograph, to determine its force and character, and whether any, and if so, what coincident relations its various phases may bear to physical states and psychological manifestations.

THIRD. The pulse under the sphygmograph to show the influence of medicine on the circulation.

FOURTH. Examination with the ophthalmoscope, to ascertain the relations of morbid changes in the optic nerve, vessels, etc., of the eye, to pathologic conditions of the brain and its membranes.

FIFTH. The skin, its temperature, color, elasticity, sensibility, etc., in the several forms and stages of the disease.

SIXTH. *Post-mortem* appearances, generally and microscopically.

SEVENTH. Photographic representations of morbid conditions and specimens.

Health Officers Annual Report of the City of Rochester. By HARVEY F. MONTGOMERY, M. D.

This is a very excellent report of the Health Physician. We find the following upon summer complaints, which, as it may be interesting to our readers, we make the quotations:—

"Milk is the main article of food for children at the age when they are "cutting their teeth." During the hot months our mortality is greatly increased and this increase is mainly among infants between one and five years of age; these deaths are the result of diarrhea, and imperfect digestion or nutrition. Children in the country, where the milk after being taken from the cow, is immediately carried to, and kept in a cool place till used, do not suffer from "summer complaints;" hence we may infer with Mr. Owen, Milk Inspector of Cincinnati, that putrid milk is an active agent in producing these diseases. I will quote from Inspector Owen's report:—

"The importance of removing animal heat from milk, before sending it to market, cannot well be over estimated in our city. Thousands of children die during the summer months of diseases of the digestive organs, by unwholesome milk alone. There is another condition of milk far more unwholesome than sour milk. It is called tainted milk, and is produced by transporting warm milk during the extremely hot weather to market, in closely covered cans. On opening the cans, a sickly, offensive odor, we might as well call the odor of putrid meat, animal odor arises. The milk is not sour; it has a slimy alkaline taste. Putrefaction has commenced in it. It is putrid and poisonous. It is a startling fact, not generally known, but nevertheless true, that milk brought to this city for sale during the extreme hot weather, confined in close cans, and exposed to the noon-day sun, reeking hot, with the animal heat not removed, is sometimes sold in this putrid state, and is about as wholesome for food, as putrid meat, or rotten eggs. Yet it is used under the mistaken notion that, because it is not sour, it is not unwholesome. Little, if any, of the milk brought to this city is properly cooled; most of it is not cooled at all, and that which is peddled around usually, is not fit to be poured down the throats of helpless infants. No wonder so many die. The wonder is, that so many live. The milk ought to be cooled immediately,—thoroughly cooled."

We find, also, the following suggestion upon the Disinfection of Night Soil:—

"One of the great evils and annoyances of the city, is the "night-cart," which fills the street where it passes, with offensive and unwholesome effluvia. This may be obviated to a certain extent, and I would suggest to the Board of Health to require the scavengers to procure the proper material, and to use it before removing the "night-soil" from the vaults. About two lbs. (or one quart) of liquid sesqui-chloride of iron, full strength, combined with 10 per cent. of its own weight of crude carbolic acid, will disinfect a cubic yard of "night-soil," according to experiments made by order of the Metropolitan Board of Health of New York City.

"This disinfectant is mixed before use, with ten times its volume of water, and then about one-half of this solution is poured upon the contents of the privy, and thoroughly stirred with an implement. About half an hour after this has been done, they begin to empty the privy, gradually using more of the disinfecting material, as they take the "soil" out. The residue is then sprinkled over the walls of the vault to disinfect them thoroughly." This fluid prepared for use, can probably be furnished to the scavengers at a cost of 30 cents for each load to be removed."

The Medical World.

This is the title of a new monthly medical journal which has made its appearance in New York, edited by Reuben A. Vance, M. D., and published by

Wm. Baldwin & Co., 21 Park Row. The first number was issued on the first of July, and contained many well written and well selected articles.

The first number of *New Remedies*, a quarterly retrospect of Therapeutics, Pharmacy, and allied subjects, has been received. It is edited by Horatio C. Wood, jr., M. D., of Philadelphia, and promises to be valuable to the profession. It is published by Wm. C. Wood & Co., New York.

Homœopathy and Regular Medicine.

Our correspondent upon this subject submits some remarkable inquiries and sratements. If any of our readers think that the questions require answer, or the statements correction, affirmation or denial, they will oblige by sending copy. For ourselves, we propose to submit it as offered, and let our readers do what they please with it.

Death of O. C. Gibbs, M. D.

Died at Frewsburg, N. Y., July 28th, 1871, O. C. Gibbs, M. D., aged 47 years. He was born in Windsor, Ohio, graduated at the Cleveland Medical College in 1848, and commenced the practice of his profession in Wayne, Ohio, soon after which he moved to Perry, in the same State, where he remained until 1856, when he removed to Frewsburg, at which place he was engaged in an extensive and successful practice nearly up to the time of his death, enjoying the confidence of his neighboring physicians and the community in which he lived, to a very high degree.

Dr. Gibbs was, for some time, associate editor of the Philadelphia Medical and Surgical Reporter, and articles from his pen have been published in the Buffalo Medical and Surgical Journal, and in several of the Medical journals of the past few years.

Jamestown, N. Y., August 15th. A. WATERHOUSE, M. D.

College of Veterinary Surgeons.—The Faculty of the N. Y. College of Veterinary Surgeons have *Resolved*, That each County Medical Society in this State, shall have the privilege of a half Free Scholarship in this Institution. Please make this known to your Society. I herewith transmit the Annual Announcement of the College, and am

Respectfully Yours,

To Prof. J. F. Miner, John Busted, M. D.
Dean Buffalo Med. College. *President of the Faculty.*

Books and Pamphlets Received.

A Physicians Counsels to Woman, in Health and Disease. By Walter C. Taylor, A. M., M. D. Springfield: W. J. Holland & Co., 1871.

School Material. J. W. Schermerhorn & Co., Publishers and Manufacturers, New York. A complete illustrated catalogue of the latest improved material demanded by the schools.

Comments of the medical press on the alleged malpractice suit of Walsh vs. Sayre. New York: Shaw & Co., 1871.

The Rejected Address. Man's True Relation to Nature; his Origin Character and destfny. By T. P. Wilson, M. D., Editor Ohio Medical and Surgical Journal. Cleveland: Robinson & Co., 1871.

Minutes of the Twenty-Second Annual Meeting of the American Medical Association, held in the City of San Francisco, May 2d, 3d, 4th, 5th, 1871.

Reply to the attack of Dr. E. S. Gaillard, by D. W. Yandell, M. D. Louisville: Morton & Co., 1871.

Artificial Induction of Labor in Uræmia. By Samuel C. Busey, M. D.

On Syphilitic Epilepsy. By Reuben A. Vance, M. D. New York: F. W. Christern, 1871.

BUFFALO
Medical and Surgical Journal.

VOL. XI. SEPTEMBER, 1871. No. 2.

Original Communications.

ART. I. *Rhinoplasty—Talicotian Operation. Result Illustrated.* Chinical Lecture by PROF. J. F. MINER. Reported by W. W. MINER, member of the Class of 1870-'71.

GENTLEMEN:—

I have a Patient upon whom I propose to operate this morning for the restoration of the nose. Operations for restoring the form of the nasal organ are called *Rinoplastic.* Two procedures have been employed, viz: 1st, the *Talicotian* operation, or Italian, from being the country of Talicotius, which consists in taking the integument and areolar tissue required for the repair of the lost organ from the arm, and; 2nd, the *Indian*, which consists in taking the required tissue from the forehead. The operation as first practised by Talicotius, chiefly, in consequence of the tedious and painful confinement of the head and arm, and the uncertainty of its results is now seldom practiced; the integument required is, at present, generally borrowed from the adjacent parts, and twisted or slid into position as found necessary, no one plan of procedure being applicable in all cases.

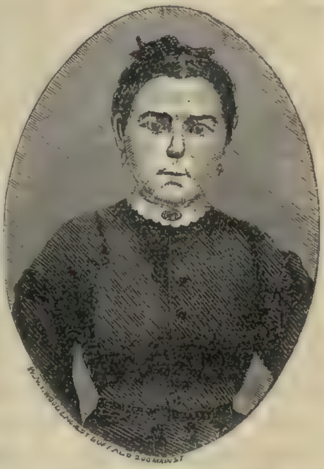
The young lady before you has lost the entire lower half of this organ, leaving the nasal cavity exposed and unsightly. Into the nature of this accident we do not propose this morning to inquire, for reasons sufficiently obvious.

After three years treatment for the disease which caused this unsightly deformity, it is believed that the parts and system generally have so far recovered as to make operation for restoration feasable.

The reasons for making an operation now nearly abandoned on account of the great difficulties of the undertaking require brief mention.

When sufficient integument is taken from the forehead to answer the purpose of repair, we have made so great a deformity on the forehead of the young lady that little would be gained towards restoring the natural appearances of the face. To take the tissue from the forehead is easier of execution, more certain of success, less painful from unnatural constraint and on many accounts to be chosen, the fatal objection to my mind, being the *deformity* it causes. It might be nearly as well to obtain the gutta purcha nose now manufactured, rather than attempt to make a nose at the sacrifice of the forehead. However, if I was obliged to choose, I would try the Indian operation rather than wear the artificial, made of rubber or papier mache. The paring of the parts, the right proportion, size, shape, and adaptation of the flap, require some of the nicest processes of surgery, and when these are employed, you are by no means certain of very satisfactory results, causes not under the control of the Surgeon may thwart your well directed efforts; partial success only is the rule; improvement may be considered success, increased deformity, failure.

We cannot now review the points of interest in detail, but must show you the operation, and describe the processes as we proceed. We first pare the soft parts at the line where we propose to attach our material of repair, taking care to remove the hardened edge so as to leave a healthy surface, full of vessels in active circulation, then a flap is dissected from the back of the arm 3 1-2 inches wide by 4 inches long, going down in this case to the superficial fascia of the arm. This flap is made in shape to acurately conform to the required location, and in this, much careful calculation is necessary. After the bleeding has ceased the arm is brought up to the face and secured by adhesive straps. Talicotius probably did not have adhesive plaster, and instead, had an expensive apparatus not half so convenient or efficient. The flap is now carefully adjusted by its free extremity to the pared edges of the nose, and fastened by silver sutures, making calculation that the flap will shrink nearly one half in its size before the union becomes complete. It was formerly deemed necessary to raise the flap from the arm and let it contract, become vascular, &c., by an interval of ten days or more, when it was refreshened and adapted to the new situation. This might work very well, but we prefer to adapt it immediately, allowing for the necessary contraction, and let this process go on at the same time that adhesions between the nose and flap are forming. This dressing, holding arm to the head, and flap in place, we design to leave as you now observe it, for from nine to twelve days, according to appearances, when we must trust for life to newly formed vessels at the point of attachment.



Three months after the operation I again introduce the patient that you may observe and admire the perfection of the result. We have had many discouragements, and the case has required and received constant watching at the hands of the ever faithful and ever attentive Sister, in charge of this Ward, and as the result of this fidelity, we are able to show you a restored organ so perfect in all respects as not to attract attention as presenting anything unnatural. It has been examined by many Surgeons of great experience, both in our own and foreign countries, who pronounce the result, in all respects, unsurpassed. This experience leads me to believe that the Talicotian operation is very difficult and uncertain, and that, though successful in this instance in a remarkable degree, yet many partial, or entire failures, will accompany every such case of success. The risks of non-union, the liability to death of flap after separating it from the arm, the certainty that any change or pressure upon the delicate vessels which supply the part attached will interrupt the circulation, or destroy the vessels altogether, constitute sources of entire failure; while miscalculation in the size, shape, and adjustment of the new material, is liable to cause failure in obtaining proper contour of the organ. The whole procedure is attended by difficulties and uncertainties; but if attended by success in one case, the achievement will amply compensate for several failures.

ART. II. *A New Method of Treating Chronic Alcoholism by Chloral Hydrate and Bromide of Potassium,* by F. BRADNACK, M. D.

The primary object of this article is to respectfully call the attention of the profession to what the writer believes to be an original method of treating chronic alcoholism; the method consisting in the use of a combination of unusually large quantities of chloral hydrate and bromide of potassium.

The secondary object is to offer a leaf from my experience in the administration of very large doses of chloral hydrate, as a small contribution towards the elucidation of the unsolved problem of the dose of this drug, especially as the last number of this journal contained some interesting correspondence upon this subject.

I think that both these objects will be best accomplished by the narration (as briefly as is consistent with lucidity) of the following case, which is but one of several I could cite:

In June of this year, Mr. S. G., aged 31 years, a victim of chronic alcoholism, came under my charge. The patient at the time of my seeing him, had for five days been drinking so continuously, that it is no exaggeration to describe him as being saturated with alcohol; it fairly exuded from every pore. According to his account, he had during these five days eaten but very little, and slept less.

Having, on the day on which he applied to me been unable to obtain as much whisky as he thought the necessities of his constitution called for, towards evening symptoms of great nervous irritation and exhaustion, began to manifest themselves, consisting principally of that indiscribable uneasiness, and *malaise,* so characteristic of this stage of chronic alcoholism.

On his retiring to bed at 10 p m., I administered to him thirty (30) grains of chloral hydrate. Never have I witnessed a result so instantaneous and remarkable as followed the administration of this medicine, having been, only just prior to swallowing it, in a state of extreme nervous irritability. No sooner was the medicine in the stomach than the patient dropped *immediately* asleep. This occurring with such unprecedented suddenness, alarmed me, (the using the drug at all being somewhat of an experiment,) and I endeavored to arouse the patient. For a moment I succeeded in doing so, and my questions elicited an attempt to answer; and at this point it became interesting to observe that, though the questions were doubtless, understood, the muscles engaged in phonation, and perhaps the nerves also, were almost entirely unable to respond to the efforts of the will. Words were so partially and imperfectly enunciated as not to be understood; and at the expiration of about one minute all ability to exert muscular power in any part of the body ceased entirely, while the patient lapsed into a perfectly death-like sleep; *so* death-like, that, with the exception of some color in the face, he might easily have been mistaken for a corpse.

After satisfying myself, however, that this appearance was only a simulation of death, and not the reality; for the heart still beat, though very slowly, and respiration was not suspended, though it was nearly imperceptible, I left him. He awoke at eight o'clock on the following morning, describing himself as feeling very well, and very much refreshed.

During the period of sleep, the nervous system seemed in an unusually expeditious manner to have recovered its tone, almost all the bad symptoms of the previous evening having disappeared. The only after-effect of the medicine appeared to be a slight amount of drowsiness, which lasted for an hour or two. These results, let it be remembered, followed the administration of thirty (30) grains of chloral hydrate only.

I now come to speak of the effects of largely-increased doses.

In the latter part of June I was again called to the same patient, then suffering from a six days' debauch. He was now in a very much worse condition than on the previous occasion. Sleep seemed impossible, and a sudden decrease in the amount of alcohol, (he having been unable to procure the expected quantity,) had developed the prodromatic stage of *delirium tremens.* To remain quiet was impossible; and he, therefore, walked the floor continuously, his mind being the scene of various delusions. At this stage I urged him to go to bed, which he agreed to do on the condition of being allowed some liquor. It being impossible to induce him to lie down while refusing this request, I deemed it advisable to comply with it. After giving him the whisky, I prevailed on him to take a "dose of medicine," which dose consisted of ninety [90] grains of chloral hydrate. Under the influence of this, he slept quietly until about 3 A.M., when I administered about 20 grains more; after which he slept until morning. He arose considerably refreshed, and would, I think, have made a good recovery without further medication, but for the fact that, during the day he drank, surreptitiously, a large amount of whisky, so that by 2 P.M. he was quite intoxicated, and by 9 P.M., reaction having come on, in a state of nervous irritability so extreme as to verge upon mania, his mind being the constant prey of delusions. Refusing savagely to go to bed without whisky, I, after useless endeavors to overcome his determination, allowed him as before, about two ounces. This temporarily tranquilized him, and under its influence he consented to go to bed, but he declared himself as utterly unable to go to sleep. I thereupon concluded to try an experiment to see whether or no several hours of sleep could not be obtained, it being evident from a variety of symptoms, together with his actions that mania would probably result if sleep was not speedily procured.

Now, it occurred to me that, from its fully-proved sedative action on the cerebro-spinal system, allied to its demonstrated ability to lessen the amount of blood in the brain, as proved by the experiments of Prof. W. H. Hammond, the bromide of potassium, combined with chloral hydrate, the hypnotic and anodyne powers of which I had previously proved to my satisfaction, might constitute a remedy more potent for good than would be either of the drugs administered alone. Acting on this idea, I prepared and administered them in combination, of which the following is the formula:

℞. Chloral Hydrat. - - - - - -	ʒ ij.
Potassii bromid, - - - -	gr. lxxx.
Syrupi Simp. - - - - -	℥ j.
Aquæ - - - - - -	f ℥ ij ss.
M.	

Ft. haust.

These enormous doses, 120 grains of chloral hydrate, and 80 grains of bromide of potassium, I administered to my patient, merely dividing the mixture into two parts, and diluting each with a little water, both doses being taken within five minutes. The effects of this prescription were very gratifying The patient slept a most tranquil and unbroken sleep until eleven o'clock the following morning, when he awoke. During the day he was very drowsy, and manifested a certain amount of hebetude of mind; but his appetite returned, the bowels moved freely, the pulse was 70, and the skin moist, while both the drowsiness and hebetude of mind gradually disappeared. I gave no medicine the succeeding night, during the latter part of which he slept tranquilly, and, on the following day declared himself well enough to proceed on a business journey, upon which he started, reaching his destination after four days in good health.

The details of the above case go far, it appears to me, to prove presumptively two points: 1st, that in cases of chronic alcoholism, enormous doses of chloral hydrate are not only tolerated, but are productive of great good; and, 2nd, that a combination of bromide of potassium with chloral hydrate furnishes a simultaneous sedative and hypnotic so excellent as to seem to indicate its use in diseases of this nature.

That I have hit upon the exact proportions most suitable to this combination, it is of course, impossible to say; but further experiments will readily decide this question. For the present, it will be sufficient to have pointed out the good effects of the combination; while it may not perhaps, be indulging an unreasonable expectation to hope that the combination suggested in this article may perhaps be found to be as useful in the treatment of cases of chronic alcoholism, as it is probable the recent suggestion of a combination of bromide of potassium and cannabis indica promises to be in the treatment of certain cases of insanity. At any rate it will do no harm to subject the hypothesis to the decisive test of experiment.

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ART. III.—*Hospital Notes*, by C. C. F. GAY, M.D., Surgeon to the Buffalo General Hospital.

Refracture of right tibea and fibula at their lower third.

Thomas Oates, of Michigan, aged 35 years, fractured his tibia and fibula on June 2nd, 1870. He entered Hospital May 20th, 1871. There is firm ossific union, the upper fragment overlaps the lower and forms an ugly prominence as well as depression. The limb is bent considerably from a straight line, is two and one-half inches shortened, the ankle joint is anchylosed, the tendo Achillis is contracted, and he has not been able to walk at all, or step with the limb. He manages to get about upon crutches.

Chloroform was given the patient on May 27th, 1871, when I succeeded in refracturing the leg, breaking up completely the union at the original point of fracture, bending the leg in any direction, and then dividing subcutaneously the tendo-achilis. The patient was now put to bed and extention, and counter-extention used. Extension was applied from a shoe constructed with a wooden sole. The leather portion of the shoe extended up, and was laced around the ancle. On July 31st, I have noted, that "the limb is greatly improved." The condition of the limb August 14th is such as to justifiy this operation for refracture. The leg is no longer,* the muscles were so rigid that extention accomplished nothing; but the leg is now straight, with the deformity much diminished, and the patient is able to do some walking about the wards without the aid of crutch or cane.

The refracture of a bone is an expedient of doubtful propriety, and I believe the Surgeon would scarcely be justified in resorting to it unless there was great deformity, and almost entire inability to use the limb, and a desire expressed also on the part of the patient that refracture should be resorted to; and then I think the Surgeon would not be justified if his object was only to lengthen the limb, since he would surely be doomed to disappointment, inasmuch as the muscles, after fracture of considerable duration, appear to have become shortened as well as rigid, and no amount of power applied will be sufficient to overcome the contraction and rigidity of them. But, if the intention is to more accurately adapt the fractured extremities and to relieve deformity, when also there might be reasonable expectations that the limb could be extended, then, the Surgeon, I believe, is justifiable in resorting to this doubtful expedient, and of subjecting his patient to the painful ordeal.

Necrosis of the Cranial Bones Trephining—Recovery.—Mr.B. German, aged 41 years, of good physique, no constitutional vice, has never had syphilis. Two years since patient received direct blow upon the head, since which there has been pain, swelling, and more or less discharge of pus. The pupils of the eyes are largely dilated, and he thinks he has had slight convulsions. On exploration of the wound with the finger I find the bone roughened, necrosed, and a portion exfoliated at the posterior superior angles of the parietal bones. On May 22nd, 1871, the patient was given chloroform, the flap dissected up and the bones found necrosed over a space measuring two and a-half inches in diameter. All the diseased portion of bone was removed, leaving an open space exposing the meninges of the brain two and a-half inches in diameter. In removing the greater portion of the bone the gnawing forceps were made use of. The flap was replaced and secured by sutures. This patient, with several others in the Hospital, was attacked with erysipelas, from which he recovered, as well as from the disease for which the operation was performed, leaving Hospital about June 10th, with wound closed, and with no more supuration. There have been no convulsions since the operation, and the pupils of the eyes have resumed their normal size.

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* September 13. Patient says his leg is lengthened one inch.

Trachiotomy—Child, two and a-half years of age, had membraneous croup, was sick three days, respiration very difficult, and at times performed mechanically; face livid, pulse feeble and rapid. The child was certain to die unless Trachiotomy could relieve, and this was the only remaining hope that could be held up as in any way adequate to saving the life of the little sufferer, and this was advised. Assisted by Drs. Harrington and Parker, I performed the operation, which gave almost instantaneous relief to the patient. There was escape, on introducing the tube, of considerable false membrane, respiration became normal, the face returned to its usual color, the pulse was diminished in frequency, and the child able to sit and stand up; and for a time the case looked promising for ultimate recovery. The trachial tube would fill up with thick tenacious mucus so firmly adhering to the sides of the tube as to necessitate cleaning every half hour.

The child lived thirty-six hours after the operation, during all the time relieved from the distress attendant upon the disease prior to operation. *Post mortem* examination showed the trachial tube above the insertion of the tube most completely corked up with false membrane, old and recent.

The final termination of this case furnishes no argument against the propriety of making the operation; but on the contrary, furnishes an argument in favor of the operation. It is a part of the duty and province of the Surgeon and Physician to relieve suffering, if he cannot cure disease. The pain inflicted by an operation, if the patient be well under the influence of chloroform, is *nil*, while the comfort of relief to both patient, and parents, and friends, afforded by the prolongation of a human life, and the subsequent exemption from suffering would seem to be good and sufficient reasons why the operation should be made in all cases.

Correspondence.

To the Editor of the Buffalo Medical and Surgical Journal.

In my last letter I referred to the disgrace brought upon the profession by the low standard of medical education. To-day I would charge the responsibility of the existence and flourishing condition of the multitudinous forms of quackery upon our national system of medical education. I am well aware that it has long been the habit of members of our profession, whose positions entitle their opinions to great weight, upon being asked: Why is it that so many irregular practitioners of medicine meet with great pecuniary success? and, why are so many different patent medicines yearly sold at an enormous profit to the manufacturer, and consumed at an equal disadvantage to the consumer? To answer that the fools are not all dead yet. Can the profession thus lightly wash its hands of this matter? Is not the standard of the professed attainment *at fault?*

Is it not a fact that from a profusion of private corporations, endowed with the authority to confer the degree of Doctor in Medicine, whose controlling parties have a pecuniary interest in the number of degrees thus conferred; there results a profession which actual experience has proven to be little better than the quacks. Not that professional ability is of less value, but that professional responsibilities are often entrusted to men who are neither capable by virtue of literary cultivation, professional attainment, or moral worth, to do anything which can increase the respectability of the profession. Upon our system of medical education rests the responsibility that the degree of Doctor of Medicine no longer entitles its holder to the respect due to a gentleman of professional culture, and high moral character; but only entitles him to the legal right to practice medicine.

At the same door lies the responsibility that throughout our whole country there is scarcely an organization of medical men whose real object is the promotion of true science, and a knowledge of the healing art; but of organizations for defence, for aggression, and for mutual admiration, there are multitudes. Is it because the duties and responsibilities of a Physician are unimportant that the guarantees for protecting the profession from those who are attracted to its ranks from cupidity, are almost entirely disregarded? To none of the honorable profession, and to few of the lucrative trades are there such sluice-ways; and yet, no man in the community, neither the man of letters, the lawyer, nor the divine, has such opportunities for usefulness, and wields such influence as the Physician, provided he is fitted by nature and cultivation for his vocation. To prove that the pitiful condition of the profession in this country is owing to our national system of medical education, we have only to turn our attention to those countries in which one must show himself to have professional ability of "what would be with us a marvelously high standard" before he is entrusted with the responsibility of the treatment of disease, or the custody of health. For example, the degree of Doctor in Medicine in Germany represents fourteen years continuous application, under teachers who are specially trained for their work. With us, it represents nothing but that the holder has parted with two or three hundred dollars to some one of our numerous medical schools, and the result is what any one might expect. At home they enjoy the universal respect and confidence of their constituents, and are everywhere known to lead the world; while we are working hard to keep even with quacks and patent medicines in the confidence of our people, and abroad, our degrees, with but few exceptions, are not even recognized.

For years the cry has come up from our Medical Associations, deprecating the low standard of medical education. You can scarcely look through a Medical journal, but you find the subject dwelt upon, either in editorial or correspondence. It is to Medical journalists and Medical Associations, a subject which can be discussed and resolved upon, when nothing else can be thought of, and yet, with the exception of the reformation lately taken place in the Medical Department of Harvard University, not one thing has been done, either by medical association or medical school, to bring about the desired reform.

Our National and State Medical Associations meet, resolve, and re-resolve from year to year; but the cancer still eats away the respectability, integrity, and honor of the profession. It is most humiliating, to think that our profession is so markedly behind our country and the age.

Recognizing the importance of reforming this evil, to what body shall we look for assistance? In the County Medical Societies is the power to work this reformation. This organization is the only one created by law for the purpose of "promoting true science, and a knowledge of the healing art." The County Medical Society is the only guardian of the profession from ignorance and cupidity. The laws of our country regulating the practice of Physic and Surgery, although very lax when compared with those of England and the countries of Continental Europe, define with exactness the requirements for a legally practicing physician. It is the duty of the County Medical Societies to see that these laws are enforced, and it is in the power of the same Societies to secure the enactment of other laws, when experience has proven that those we now have are insufficient. What account these Societies can give of their stewardship, is too well known. They have slept while standing guard.

The law recognizes three epochs in the preparatory life of the physician; two of these, the first and the last, are under the control of County Medical Societies. First, they must pass judgment upon the literary attainments and moral character of the young man who desires to become a student of medicine before he can enter upon such study. What would have been the effect upon the profession if proper advantage had been taken of this opportunity for raising the standard of medical education can hardly be overestimated. Again, the County Society is called upon to decide whether the person holding a degree of Doctor in Medicine, and who wishes to connect himself with such Society, and thus become a legally practicing physician, is "of temperate habits, good moral character, and legally authorized to practice." What a spectacle we present when we entirely ignore these opportunities for raising both the standard of professional attainment, and professional honor, and then cross the continent to attend a National Medical

Association, and there resolve that "we deplore the low standard of medical education."

Reason points, and experience proves, that assistance in this work can neither come from medical schools or medical associations, controlled by the faculties of such schools. Evolution has not yet carried human nature to that point of perfection justifying the expectation of man's doing without pressure, that which he sees is against his interests.

Unfortunate it has been for the medical profession, and unfortunate it will be for our national system of medical education, that the good of the one is not the good of the other.

H. R. Hopkins.

Buffalo, September, 1871.

Homœopathy and Regular Medicine.

Rochester, N. Y., September, 1871.

To the Editor of the Buffalo Medical and Surgical Journal.

My Dear Sir,—

In the last number of the *Buffalo Medical and Surgical Journal*, I noticed an article, entitled "Homœopathy and Regular Medicine." This production bears the signature of a young member of your County Society. Upon the closing page of the Journal, is an editorial note, calling attention to this article, and offering to any of your readers an opportunity for replying to, or correcting its statements *if* they deem it *necessary*. I trust that they all feel as I do in regard to it. My sentiments are expressed very fully in *Hosea 7th chap. 8th verse*, "Ephraim is a cake not turned"; and again in *Hosea, 4th chap. 17th verse*, "Ephraim is joined to his *idols ; let him alone.*"

Accompanying please find a copy of our revised by-laws, &c., of Monroe County Medical Society, just issued.

I am, with esteem,
very sincerely, yours,

E. V. Stoddard.

Miscellaneous.

The Diagnostic and Prognostic Value of Heart-Sounds.

BY AUSTIN FLINT, M. D.

It is difficult, without the lessons of clinical experience, to appreciate the fact that the intensity and quality of heart murmurs are not of much account in judging of the importance of valvular lesions. A murmur very loud, notably rough or musical, it would seem, should denote graver lesions than one which is feeble, soft, and blowing. Experience, however, shows that it is not so. A striking illustration of this fact came under my observation some time since. A gentleman from Cuba consulted me for disease of the heart. He had a musical murmur loud enough to be heard with the ear removed some inches from the chest. The sound had attracted his attention, and this first led him to see a physician. He was told that he had disease of the heart, of which he had previously had no suspicion, having no ailments referable to that organ, and, indeed, considering himself perfectly well. He became at once a medical curiosity, and he had been examined by many physicians. The case exemplified the fact that the diagnosis of a cardiac lesion is sometimes a misfortune. The man had no peace of mind after the discovery of the murmur. He relinquished his business, and came to this country for medical opinions. The lesion, as regards present importance, was innocuous; and had he remained ignorant of its existence, he would not only have been contented and comfortable, but his condition would probably have been more favorable for the preservation of health.

It follows, from what has been said, that with reference to prognosis, it is important to go further in diagnosis than to determine, from the presence of murmur, the existence of an organic disease of the heart. If we except the accident of embolism, we are warranted in saying that, as a rule, in cases of valvular lesions giving rise to murmurs, whatever be their number, intensity, and quality, there is no danger, either immediate or near at hand, so long as the heart is not enlarged; for clinical observation shows that, in general, valvular lesions cause enlargement of the heart before leading to more remote effects, which involve distress and jeopardize life. Moreover, clinical observation shows that in most cases, enlargement of the heart is produced by valvular lesions slowly, the ulterior effects being, of course, proportionately distant. I would remark, in this connection, that in order to judge of the import of organic murmurs aside from enlargement of the heart, the heart-sounds claim more attention from stethoscopists than is usually given to them. It is certain that the aortic and the pulmonary-artery second sound can generally be interrogated separately by auscultation; and I believe this statement may also be made with respect to the mitral and the tricuspid valvular element of the first sound. The absence of any abnormal modifications of these several components of the two sounds of the heart is an important point in judging of the innocuousness of valvular lesions, the existence of which is revealed by the presence of murmur.

The difference in the tolerance of chronic affections of the heart is to be considered with reference to the prognosis. What is true of most chronic diseases—namely, that the same lesions are tolerated very differently in different cases, is especially exemplified by the structural affections of the heart. It is truly astonishing how well borne, in some cases, are cardiac lesions of unusual magnitude. A case which recently came under my observation afforded a striking illustration of this fact. The patient, a man of middle age, was suffering greatly from dyspnœa in paroxysms, together with loss of appetite and general prostration, and the case ended fatally within a few weeks after the occurrence of the symptoms just named. I saw the patient a few days before his death, and found the heart enormously enlarged. The apex-beat was in the eighth intercostal space several inches without the linea mammalis; and the dullness on percussion over the præcordia was proportionately increased both in aera and degree. Here was truly a *cor bovinum.* There were present murmurs, indicating both aortic and mitral lesions. There had occurred an attack of acute articular rheumatism fifteen years ago. Now, prior to a few weeks before his death, this patient had seemed to be in excellent health, and he declared that he was so. He was a man of very active habits, engaged in business (that of a wool merchant in the country) which required much travelling. He had had on one occasion an attack of hemiplegia of very brief duration, which was probably attributable to embolism. With this exception he had not for many years been a patient, considering himself a healthy man. He was a man of temperate habits, but a good liver as regards diet, eating very heartily, and digesting his abundant meals without difficulty; yet it is certain that for several years there must have been very great enlargement of the heart, resulting from the valvular lesions. For some time before the occurrence of grave symptoms referable to the heart, he had done an unusual amount of mental and physical work, accompanied with much excitement; nervous æsthenia and impaired appetite ensued, and under these circumstances he began to suffer from dyspnœa. He was compelled to keep his bed; he became despondent; the existence of disease of the heart was forced upon his attention, and he failed rapidly. The history of this case represents what I have been repeatedly led to observe in other cases—to wit, the tolerance of disease of the heart, while it was advancing more or less slowly, until it had attained to a great amount, the person affected, in the meantime, not considering himself an invalid, taking no remedies, living freely, and engaged in pursuits involving activity of mind, or of body, or of both. The case alse represents a fact which I have repeatedly observed—namely, that from the time when persons with disease of the heart become patients, that is, when they become impressed with a knowledge of the existence of the disease, and are obliged to give up their usual pursuits and habits, they are apt to fail rapidly. It is a *facilis descensus* from that time. The latter fact, as well as the remarkable tolerance of the disease under the circumstances stated, teaches an instructive practical lesson.

In speaking now of the tolerance of cardiac lesions, I do not, of course, have any reference to those which have already been referred to as innocuous. I refer to lesions which are more or less serious—that is, involving either obstruction to the free passage of the blood through the orifices of the heart, or regurgitation, or both of these immediate effects combined, together with enlargement by hypertrophy or dilatation separately or in combination.

All clinical observers who have seen much of diseases of the heart must have been struck with the fact, that the inconvenience and suffering attendant on lesions the same in character and extent, differ widely in different cases.

What are the circumstances on which this variation as regards tolerance depends? The question not only has a bearing on the prognosis, but it is of great importance in relation to management. I will devote to it a few remarks.

In general terms, chronic diseases of the heart, as of other organs, are tolerated in proportion as the functions of the body, exclusive of the part diseased, are healthfully performed. The internal conditions of general health and constitutional strength relate especially to the series of functions which begin with ingestion and end with nutrition. Other things being equal, the toleration is best and longest when, *first* of all, the ingesta are ample; *second,* when digestion is active; *third,* when, owing to adequate assimilation, the constituents of the blood are in normal proportion; *fourth,* when the nutritive supplies in the blood are well appropriated; and *lastly,* when the secretory and excretory organs do their proper work. Now, a healthful performance of these functions is not incompatible with considerable damage to the central organ of the circulation; and in so far as it is practicable to maintain those functions at or near to the state of health, the toleration of disease of the heart will approximate to completeness. *Per contra,* the toleration will be incomplete in proportion as the functions of the body, exclusive of the heart, are feebly or imperfectly performed; in other words, in so far as the condition just named of general health and constitutional strength are deficient. The blood may be considered as representing the healthful performance, or otherwise, of the functions of nutritive and destructive assimilation; so that the simple phrase, *healthy blood,* comprehends the grand requirements for toleration."

In the discussion which followed Dr. Flint's paper, the following statistics, based on ninety *post mortem* examinations made in the Bellevue Hospital, New York, were brought forward by Dr. Alfred L. Loomis. They illustrate the question of how often and in what manner cardiac lesions are the direct cause of death:

It will be seen that valvular disease, cardiac hypertrophy, and dilatation, were present in fourteen cases. Of this number, heart lesions were the cause of death in seven; death was sudden in one, and was caused by stenosis of the mitral and tricuspid orifices.

In fifteen cases valvular lesions, with cardiac hypertrophy, were present, in eleven of which the heart lesions were the cause of death; in five of these death was sudden, and the valvular lesions were aortic in one, mitral in another, aortic and mitral in another, mitral and tricuspid in another, and mitral and pulmonic in another.

In six cases valvular lesions, with cardiac dilatation, were present. In four of these the heart lesions were the cause of death; two died suddenly, in one the valvular lesions were mitral stenosis and aortic thickening, in the other the aortic, mitral, and tricuspid valves were all diseased.

In forty-six cases valvular lesions were present without cardiac hypertrophy or dilatation. In only two of these were heart lesions the cause of death, in neither of which was death sudden. Lesions of the coronary arteries were present in three cases; in one, death was sudden. Thrombi of the heart were present in six cases, death sudden in one.

It will also be seen that the number of deaths due directly to heart lesions was twenty-six. In nineteen cases death was sudden; number of sudden deaths due to heart lesions, ten; number of gradual deaths due to heart lesions, sixteen; number of deaths not due to heart lesions, sixty-four. Of the nine sudden deaths not due to heart lesion, four were from cerebral apoplexy, four from uræmic convulsions, and one from croupous laryngitis.—*Exchange.* —*Richmond and Louisville Medical Journal.*

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Dangerous and Fatal Results from the use of Hydrate of Chloral.

By H. W. Fuller, M.D., F.R.C.P., Senior Physician to St. George's Hospital

As the hydrate of chloral is being largely administered as a sedative and hypnotic, and is often recklessly employed in excessive doses, as if it possessed no noxious properties, it may be well to record a few cases in which moderate doses were productive of dangerous and even fatal results.

On the 9th of February, 1870, J. S—— was admitted under my care into St. George's Hospital, suffering from slight anasarca and bronchitis, connected with Bright's disease. He was restless and nervous, and unable to sleep, and therefore, after he had been some days in the hospital, and was exhausted for want of sleep, I ordered the chloral draft of the hospital (containing thirty grains of chloral) to be taken at bedtime. Soon after he had taken it, he jumped up in bed, clutched at his heart, and complained that the medicine produced a sense of burning. In the course of a few minutes he became violently delirious, and though, after a time, the delirium subsided, so much depression ensued that Dr. Jones, our resident officer, had great difficulty in sustaining his heart's action. Gradually, however, the heart recovered itself, the pulse returned at the wrist, and in a few hours he was out of danger.

Having just read M. Liebreich's assertion that hydrate of chloral, when in contact with an alkali, is transformed into chloroform and formic acid, it occurred to me that the extraordinary results witnessed in my patient's case, might be attributable to an alkaline condition of the stomach, whereby the chloral was at once converted into chloroform, and thus induced the symptoms which were observed. I therefore determined to try it once again, taking care, on this occasion, to guard against such an occurrance, by administering the chloral in combination with a full dose of acid. The result, however, was precisely the same as on the first occasion. Again there was the same sense of burning and oppression at the chest, followed first by violent excitement and delirium, and subsequently by collapse, with failure of the heart's action; and on this occasion, as on the last, Dr. Jones was long doubtful whether the man would recover. I need not add that I did not make trial of a third dose, even experimentally.

From that time until the first day of the present year I did not meet with any case which led me to question the harmlessness of chloral. I had given it to hundreds of patients, in doses varying from ten grains up to forty-five grains, and had been called in consultation to two patients, one of whom had harmlessly taken two drachms and a half, and the other three drachms, in the night prior to my visit. In some instances it failed as a hypnotic; in some it produced headache; and in others it gave rise to more or less excitement; but in none was it followed by any symptoms calculated to cause alarm.

On the first of last January, however, I was called in consultation, to see a case in which thirty grains of the hydrate of chloral proved fatal. The patient, a young lady, aged twenty, who was previously in fair health, complained, on the 29th of December, of constipation, and other symptoms of stomach derangement, for which her medical attendant administered a pill at night, followed by an aperient draught in the morning. On the 30th the bowels acted, and she was relieved; but she passed a restless night, and, on the 31st, complained of uneasiness in the lower part of the abdomen, which was attributed to the approaching menstrual nisus. As she was very hysterical, a neighboring practitioner was sent for early, and when he met the family medical attendant in the afternoon, they determined, as she was nervous and restless, and had obtained little or no sleep on the previous night, to give her thirty grains of chloral. She took the dose about 10 p.m. on the 31st, and almost immediately became much excited, and complained of pain in the chest. In about an hour the excitement passed off, and she fell asleep, and slept heavily all night. In the morning she was sleeping so heavily, and looked so pale, that the family became alarmed, and sent for the gentleman who had seen her the previous day. When he arrived, she was very pale, and breathing heavily—a sort of deep sighing respiration; there was no pulse at the wrist, and her extremities were rather cold. It was impossible to rouse her in the slightest degree. He gave her stimulants, and applied warmth to the extremities, and gradually the pulse returned to the wrist, though, at the best, it was only just perceptible. The family medical attendant subsequently met him in consultation, and together they did all that appeared to be expedient; but as everything failed to rouse her, or in any way to alter her condition, they asked me to meet them in consultation at 2 p.m.

When I saw the patient, she was lying on her back, with her eyes closed, and breathing heavily, the respiration having a distinctly sighing character. She was very pale, and somewhat cold; the skin was dry; the pupils were large and dilated, but acted sluggishly under the influence of strong light; the pulse was scarcely perceptible, but the heart was beating regularly, about 120 in a minute, and though its action was very feeble, its sounds were clear and its rhythm was normal. There was no distention of the abdomen—indeed, it was flat and soft; there was no contraction, or rigidity, or undue flaccidity of the limbs. It was impossible to rouse her in the slightest degree; but, when fluid was put into her mouth, she swallowed without much difficulty, so that she took a full-sized wineglassful of brandy-and-water in the course of ten minutes.

The indications for treatment being obviously to sustain the heart's action until the effect of the chloral had passed off, we determined to give her brandy and diffusible stimulants, as far as possible, by the mouth, and to supplement our efforts in that direction by repeated injections up the bowel of strong beef-tea and brandy. However, everything proved unavailing. She continued in much the same condition until about nine o'clock the following morning, when she sank, without having exhibited the slightest consciousness, or moved a muscle, from the time she fell asleep on the evening of the 31st of December.

Judging from what I have learned from various members of our profession, I believe that, although fatal consequences may rarely follow a dose of thirty grains of the chloral hydrate, yet that unpleasant, if not dangerous, symptoms, are not unfrequently experienced. Dr. Tuke informs me that in a man whom he saw suffering from the effects of intemperance, thirty grains very nearly proved fatal, the symptoms of depression and failure of the heart's action being most alarming; and Mr. Fred. Webb, of Maida-vale, has given me the particulars of another case, in which an elderly man very nearly lost his life from the effects of thirty grains. The faintness, pallor, and depression of the heart's action, were excessive, and for some time Mr. Webb was in doubt whether he would be able to sustain the pulsations of the heart until the effects of the chloral had passed.

Doubtless these cases are quite exceptional, and are met with only in about the same proportion as cases of death from the administration of chloroform. But the facts I have cited are sufficient to prove that such cases are more frequent than is commonly supposed. Further, they inculcate the necessity for caution in the administration of the drug; and they point to the conclusion that thirty grains form too large a dose for ordinary use, and especially for a patient in whom the effects of the chloral have not been previously tried. As a hypnotic, in nervous restlessness, ten or fifteen grains ordinarily prove efficacious; and I have not seen or heard of any unpleasant symptoms following these doses. But the cases above recorded prove that larger doses, though usually harmless, and often marvellously efficacious, are not unattended with risk; and now that the public are beginning to dose themselves with chloral, as they have done of late years with chlorodyne, this important fact cannot be too widely known.—Manchester Square, W., March 2nd, 1871.—*Nashville Journal of Medicine and Surgery.*

Cundurango.

During the past six weeks I have been in almost daily receipt of communications from medical gentlemen in different sections of the country, requesting some reliable information relative to the specific and marvellous virtues claimed for the cundurango, as a remedy in the treatment of cancer.

As it would involve the expenditure of more time than I can spare to reply to these several letters of inquiry separately, I have determined to avail myself of your courtesy to make public such information as I have been able to obtain, and the conclusions to which I have arrived, touching the merits of this new so-called remedy for the cure of cancer.

The source from which the drug is obtained, the mode of preparation and administration, together with the romantic and apochryphal history of its discovery, have already been published to the world. It is not necessary, therefore, for me to refer to such publication further than to observe that the question very naturally suggests itself to the medical mind, what proof have we that this individual was affected with cancer at all? Does the diagnostic evidence of an ignorant, non-professional woman furnish sufficient scientific testimony to enable us to believe that this was really a case of that disease? Do not all the circumstances connected with this story justify the opinion that it is a sensational fiction invented for the occasion, or a traditional superstition of the ignorant inhabitants?

Passing from this question of its discovery, we take the drug as presented to us in this country. It seems that specimens of the cundurango were distributed sometime during the month of April last by the Department of State to the Surgeon General of the United States Army, to the Chief of the Bureau of Medicine and

Surgery of the United States Navy, and to the Department of Agriculture, in order that the remedy should be subjected to the test of chemical analysis, as well as therapeutic experimentation by scientific and competent medical men. In accordance with this purpose a chemical analysis of the cundurango was made by Professor Antisell, of this city, an accomplished and experienced practical chemist, the result of which is here given, as an extract from his report:

"Fatty matter, soluble in ether and partially in strong alcohol, .7; yellow rosin, soluble in alcohol, 2.7; starch, gum, and glucose, .5; tannin, yellow and brown coloring matter and extractive, 12.6; cellulose liquin, etc., 64.5.

"On distillation, no volatile oil or acid was obtainable; no crystalline, alkaloid, or active principle was separable by the usual method of proximate analysis. Whatever medical virtues the plant may possess must reside either in the yellow rosin or in the extractive. The former is soluble in alcohol, the latter in water. In the water decoction some of the rosin is diffused, but the greater portion of the rosin is not extracted by water. The therapeutic position of the plant, judged from analysis, is among the aromatic bitters.

It will thus be seen that, unlike almost all of those vegetable growths which possess very powerful and radical therapeutic influences upon the animal economy—such as nux vomica, cinchona, opium, stramonium, etc., etc.—it contains no active principle capable of being eliminated by the ordinary modes of chemical analysis, and hence it is fair to suppose that it really possesses none, and that its virtues, if it possesses any, are dependent chiefly, if not entirely, upon the resinous principle which is insoluble in water; and yet we are told that it was the decoction or infusion of the drug which was used by the humane and affectionate wife, in her first efforts to dispose of her husband, which first developed its wonderful virtues.

Through the courtesy of Surgeon Norris, of the United States Army, I have been permitted to read his report, made to Surgeon General Barnes, detailing the results of his experience with the cundurango in the treatment of cancer, and, although not authorized to do so by publication, I shall take the liberty of stating that, although the case selected for experiment by him presented all the conditions required for a fair test of its merits, it utterly failed to arrest the progress of the disease, or in any decided manner to modify its character or mitigate the suffering of the patient. The case terminated fatally at the expiration of five weeks from the commencement of this treatment, notwithstanding its uninterruped administration during that period. I will here add, that exactly similar results followed in another case which was treated in New York with the cundurango, under instructions from the Surgeon General. In both of these cases, specimens of the morbid products procured after death were submitted to microscopical and other tests to confirm the accuracy of diagnosis.

I am also indebted to the gentlemanly assistant, to the chief of the Bureau of Medicine and Surgery, United States Navy, for the privilege of perusing a lengthy communication upon the subject of cundurango, made to that bureau by the accomplished pharmacist, Dr. E. R. Squibb, of Brooklyn, in which he very clearly exhibits his entire want of confidence in its merits as a cure for cancer, and classifies it with the numerous empirical agents which have, from time to time, heretofore agitated the public mind and disappointed the hopes and expectations of so many unfortunate victims of this terrible malady. I omitted to mention that two other cases of cancer were treated with the cundurango by a medical officer of the army in this city, but with no favorable results.

In view of these facts, together with others equally impressive which might be stated, I am irresistibly forced to the conclusion that the cundurango possesses no value whatever as a remedial agent in the treatment of cancer; that it is capable, indeed, of doing indirect injury by disturbing the functions of the stomach and impairing nutrition; that, so far as I have been able to learn, not a single well-authenticated case of cancer has been cured by its use; that I will venture to affirm there is not a physician whose integrity and veracity can be relied upon, here or elsewhere, who will declare that he has cured a case of cancer by the use of the cundurango, and that he is prepared to prove it by exhibiting his patient to the test of competent medical judges.

I am aware that some importance has been given to the testimony of Vice-President Colfax in favor of a cure having been effected by the use of this remedy upon a member of his family, but does it occur to the public that the honorable gentleman and his friends may have been mistaken in the diagnosis? Was this a case of genuine cancer? and is the disease permanently cured, if so? In a medical and diagnostic point of view, the testimony of Mr. Colfax is, of course, entitled to no more weight than that of any other layman.

In conclusion, I would simply remark that the apparent and conceded attempt to manufacture a fictitious reputation for this drug, resting as it does upon such questionable data, seems rather to have been inspired by the dazzling prospect of pecuniary speculation, than by a laudable desire to advance the triumphs of science, or to alleviate the sufferings of unfortunate humanity.—ALEX. Y. P. GARNETT, in *Jour. of Phar.*

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Wanted—A Rara Avis.

A physician is wanted in a desirable location in the northern section of the State. The application calls for "a graduate of some respectable college, of good common sense and urbane manner—one not too airy or technical, or in the habit of boasting of the great practice he has had elsewhere, and in his cases and cures—

a man of temperate habits, and disposed to observe the recognized code of professional ethics." In drawing this picture, we fear that the writer has unwittingly described such rare attainments as are seldom united in one individual.—*Pacif. Med. Journal.*

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Action of Mercury on the Liver.

In the *Edinburgh Medical Journal* for April, Dr. T. R. Frazer presents the ablest and most exhaustive paper on the action of mercury on the liver that we have ever seen. He takes up and discusses *seriatim* the various doctrines in regard to the influence of mercury on the liver, viz.: "1. Mercury simply increases the flow of bile into the intestines. 2. It causes an increased formation of the bile by removing abnormal conditions that interfere with the secreting function of the liver. 3. It causes an increased formation of bile by an indirect action on the liver. 4. It causes an increased formation of bile by a direct and primary action on the liver. 5. Mercury has no cholagogue action whatever." After reviewing these propositions he concludes that we are entitled to maintain the *first* as true. The second, third, and fourth propositions may be regarded as elaborations of the first, advanced to explain the obvious effects on which it is founded. But in the present state of our knowledge of pathology and physiology it is impossible to prove that any one of these three is true. The fifth proposition maintained by Thudicum, Scott and Bennett has not been proved by them. In their experiments various disturbing agencies were present. Lesion of nerves, absorption of bile unmodified by digestion, the presence of inflamation and suppuration in the immediate vicinity of the liver, and imperfect digestion were all present, and must have exerted a modifying influence. The most important of these was the disturbance of digestion caused by interrupting the flow of the bile into the intestines. This alone would be sufficient to render inconclusive the experiments of these gentlemen.—*Michigan Med. Journal.*

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On the Application of Carbolic Acid as a Local Anæsthetic in Surgical Operations.

By Dr. J. H. Bill, Surgeon U. S. Army.

In conducting some investigations on the action, &c., of carbolic acid, the writer has made the following observations, which, as they seem to be of practical importance, he communicates in advance of the other results:—

All who have handled this substance must have noticed the tingling sensation, not unlike that produced by aconite, in the finger tips and other parts touched by the acid, which presently passes in a greater or less anæsthesia. On trying to determine the amount of this anæsthesia with an ordinary æsthesiometer it was found not only impossible to distinguish two points, however widely separated, but even to recognise the presence of one.

The prick of the point was not felt at all as pain, nor was an incision productive of uneasiness. The experiment was, therefore, extended thus :—The radial side of the writer's left forearm was covered with a cloth soaked in a saturated solution for a half hour, then a streak was traced over the course of the radial artery with a camel's hair brush dipped in acid liquefied by one-twentieth bulk of water. This streak extended from the styloid process to near the elbow, and after a few minutes was rubbed off. An incision was then made with a common scalpel from a point about two inches above the styloid process towards the internal condyle for five inches, occupying as near as possible the middle of the streak made with the brush, and extending down to the fasciæ investing the flexor muscles [superficial] of the thumb and fingers, so that at its lower extremity the radial artery was exposed and could have been ligated. This incision was unattended with pain, save where nerves distributed to or passing over the muscular fasciæ were pricked or divided, and even in this case the pain was not at all unbearable. *The incision af the integument was painless,* and the writer would have been unconscious of the injury save from the sensation communicated to his hand holding the knife as it was drawn through the tissues This observation or experiment was made nearly a year ago. It was applied practically at once to all minor cutting operations. The writer has not incised a felon or bubo since without successfully employing this method for preventing or greatly mitigating pain. Many cases could be given, one will suffice.—David Harris, of Vancouver, applied with his second finger of the left hand highly inflamed from a felon, the parts much injured by burrowing of pus. A previous felon had been treated on another finger a few months before, and the requisite incision had given him exqusite pain ; the patient therefore apprehended great suffering from any operation on the finger now diseased, and begged for chloroform. However, the finger was soaked for fifteen minutes in warm water containing three per cent. of carbolic acid, dried, and then the brush dipped in the concentrated acid, drawn over the finger in the course of the intended incision. These, two in number, were then made, using a thin edged scalpel by a slow sawing motion, allowing only the weight of the knife to make the cut. The patient stated that he had suffered no pain, or not more than would have resulted from handling the parts. The parts healed at once. Sometimes it is necessary after making an incision nearly through the integument, if sensibility becomes apparent, to brush out the wound made with some liquefied acid before extending the incision deeper. This was necessary in a palmar abscess treated by this method without pain. The writer has excised a small tumour partly by this plan. Buboes have been operated on painlessly, and in short, the writer can recommend the plan in any cutting operation where no dissection of the skin is involved, and where all the pain results from the cutting of the skin. It is hoped that it will be of special service to those who are compelled to operate without an assistant. The writer was thus compelled this summer to remove from the right hand, by an incision of over two inches in length, a large wooden splinter which had been thrust through the palmar fascia, and had lodged under the tendon of the lumbricalis of the index finger. It was done without pain, save where a nerve was divided. The incision healed without a scar.

These facts, which the writer believes he is the first to point out, have theoretical relations of great interest which may be discussed in a future paper.—*American Jour. of Med. Sciences, Oct.* 1870, *p.* 573.—*Braithwaite's Retrospect.*

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Deaths from Chloral Hydrate.

Dr. H. W. Fuller describes a number of cases in which alarming effects followed the exhibition of 30 grains of chloral, besides one fatal one. The latter occurred in a young woman, previously in good health, to whom the remedy was prescribed for hysterical symptoms occurring at the menstrual period. The dose was taken at 10 A.M. She immediately became much excited, and complained of pain in the chest. In an hour she fell asleep, slept heavily all night, and continued so doing all the next morning, although every effort was made by the medical attendant to rouse her. When first seen by the latter respiration was deep and sighing, the pulse imperceptible at the wrist. Under the use of external and internal stimulents the pulse became slightly apparent. At 2 P M., when Dr. Fuller saw her, she was very pale and cold, with widely-dilated, very sluggish pupils, and heavy, distinctly sighing breathing; the pulse was barely perceptible, the heart beating 120 a minute, with clear sounds of normal rhythm, although its action was manifestly very weak. The abdomen was flat and soft, the limbs moderately relaxed. In spite of active stimulation she died the next morning, without ever having moved a muscle or shown the slightest sign of consciousness after having fallen asleep.—*London Lancet, March* 25, 1871.

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Mr. H. Norris reports the case of a woman, violent, hysterical, dipsomaniac, who took 712 grains in nine days, 260 grains of this being taken in the last 35 hours. In the evening of the day preceding her death she had been out to tea; between 10 and 11 P.M. she took 40 grains, and 1 and 2 A.M. 36 grains, and at day-light another 36 grains. Between 10 and 11 A.M. awoke and went down stairs to breakfast; about 12 was found in bed, vomiting; was left five minutes, and was then found dead on the floor. At the autopsy no smell of chloroform could be detected. The heart was found somewhat pallid; the ventricles empty; the auricles partially distended by dark semi-coagulated blood. The stomach, liver, heart, kidney, and spleen were chemically examined one hundred and thirty hours after death. They were remarkably well preserved. On distillation with caustic soda, chloroform was obtained from the contents of the stomach and from the liver, but not from the tissues.—*London Lancet.—New Remedies.*

Dose of Chloral.

Dr. Richardson (*Pharmaceutical Trans.*) believes that it is not prudent to administer more than 120 grains of chloral-hydrate in 24 hours, and that 180 grains is a fatal dose, 120 a dangerous one. [50 grains is a dangerous dose under ordinary circumstances.—ED.] —*New Remedies.*

The Source of Scarlet Fever Poison.

Whilst we know much of its mode of operation upon the body, we remain profoundly ignorant of the nature and source of the poison of scarlatina, and he must be a bold man who will venture to erect, upon our present stock of data, a theory as to its origin. Dr. Carpenter, of Croydon, however, who speaks with great authority on sanitary matters, has broken fresh ground on this point, and, in a very interesting and suggestive paper read to the Medical Society, brought forward a series of facts which, he believes, go far to show that the poison of scarlet fever is an emanation resulting from incipient decomposition of the blood of vertebrated animals, either healthy or diseased, and produced under the influence of certain conditions of temperature, magnetic state, and moisture; this poison being more virulent, perhaps, when produced from diseased blood. Dr. Carpenter detailed the history of various outbreaks of scarlet fever occurring in localities where slaughter-house refuse had been freely used as manure or in houses contiguous to places at which it had been stored, or such as were so placed as to receive emanations from decomposing blood. Dr. Carpenter did not deny the contagiousness of scarlet fever, but he argued for its origination as it were *de novo*, in the manner indicated. He further stated that, though the enforcement of ordinary sanitary precautions, such as are now in force, did not prevent the occurrence of the disease, yet it very materially influenced the mortality; and he adduced a number of facts, which he gathered from the condition of Croydon, to show that in those houses from which sewer emanations were rigorously excluded, and in which ventilation and cleanliness were observed, scarlatina was robbed of its virulence, and became a mild affection; where as in the badly-sewered and badly-built portions of the town the disease was very fatal. He expressed the belief that scarlatina would be shorn of its fatality if blood were not allowed to be shed in our town and villages except under proper regulations by which it should be excluded from the sewers, and our houses were probably hygiened. Such is the gist of Dr. Carpenter's paper.—*London Lancet.*

The Formation of Urea.

The methods thus far adopted (by Prevost and Dumas, Oppler, Perls, Zaltsky, and Grehaut), to prove or disprove the part taken by the kidneys in the formation of urea, are based principally upon the examination of the blood of the renal vessels passing to or from the kidneys, or that of the general system, with a view to its changeable proportion of urea with retained or extirpated kidneys, or with extirpation of the kidneys with litigation of the ureters.—The uncertainty of all the modes of fixing the amount of urea in the blood induced Dr. Rosenstein to adopt a new method for the purpose. He compared the amount of urea in the urine of dogs, with the same food, after the retention of both kidneys, and the extirpation of one. The result was, that where one kidney only was left, the same amount, and generally even more urea was secreted, than where both were retained. As long as this result was obtained only some time after the extirpation of the single kidney, it was convincing, because in the mean while the remaining kidney was decidedly enlarged, and an augmented compensatory function through an increase of tissue or of secretory elements might be assumed. Meanwhile Dr. Rosenstein obtained the same result in one animal which before the operation had been put on full diet, and whose desire for food was by no means diminished by the operation. In this case the elimination of the urea, in both the days following the operation, was the same as before, when both kidneys were present. Since in these two days no noticeable increase of size took place in the remaining kidney, it certainly follows that the kidneys do not take part in the formation of urea.—*Centralblatt Medizinischer Wissenschaften*, No. 2371.—*N. Y. Med. Journal.*

Ulcers of the Cervix Uteri.

M. Despres, surgeon to the Paris hospital for women affected with venereal diseases, has published a book on the above subject. The work has been succintly analysed in the *Montpellier Med.*, April and May, 1871, and the reviewer quotes the following passage, which is worth attention:—"The diseases of women have often proved a rich mine to certain authors, and the extensive practice derived from their writings has mostly been founded on the use of some new agent, hence the many remedies which have been proposed. On the other hand, we find unbiased men giving an account in their works of the therapeutical means which have been extolled, registering failures and occasional success. I am anxious to state my belief that the latter depends mostly on coincidences, and that the cures might have been obtained by other means. It should be remembered that most specialists in the diseases of women use but one mode of cure; such as the red-hot iron, lunar caustic, and more or less concentrated solutions of the latter; all, however, curing ulcers of the cervix in about the same lapse of time." M. Despres ignores all internal remedies, and relies on topical applications. He considers, however, that complete continence, cleanliness, an occasional cauterization by any agent, are very efficacious, especially when patients are treated early, and subjected to constant control. The author adds that he has found the *plug* very useful, and gives the following description of it:—Take a small piece of coarse gause, in which a pledget of cotton wool is placed after it has been filled with about 15 grains of powdered alum. Fold the gauze over the wool, and tie the ends of the former with a thread five or six inches long, which is allowed to hang out of the vagina to facilitate the removal of the plug. The latter shonld remain twenty-four hours.—*London Lancet.*

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The Hypodermic Use of the Sulphate of Quinia.

By Francis L. Haynes, M.D., one of the Resident Physicians at the Episcopal Hospital.

We see little concerning this method of administering quinia in the medical periodicals of to-day. Although formerly received with favor, it is now, I think, viewed with distrust by medical men generally. There is, without doubt, good foundation for such a feeling. We have all read or heard alarming accounts of the irritating effects of quinia used in this manner. Thus, Prof. Fonssagrives mentions* two cases in which fatal tetanus followed the hypodermic use of sulphate of quinia dissolved in sulphuric acid and water. Dr. Mitchell, of New Orleans, records† a case in which a deep ulcer, and, finally, fatal tetanus, followed the injection of sulphate of quinia. He does not inform us of the way in which the salt was prepared for use.

It is possible, however, that the bad effects of this method are caused by the large quantity of acid used in dissolving the sulphate, and not by the salt itself. The following experiments and cases tend to support this opinion. They were made upon a healthy adult male.

The first two experiments were made in order to establish stand-

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*Lancet, July 6, 1867.
†Abstract of the Medical Sciences, vol. xlvi. p. 100.

ards with which to compare the effects of the subsequent experiments.

Experiment I.—One fluidrachm of distilled water was injected over the left biceps muscle of a healthy man. Slight pain, tenderness, redness, and swelling ensued. All these symptoms disappeared in a few hours, except the tenderness, which lasted four days.

Experiment II.—One-half a grain of sulphate of quinia was dissolved in acetic acid, and sufficient distilled water added to make half a fluidrachm. This was injected over the left long supinator muscle of the radius. Intense stinging and burning pain attended and followed the injection. On the next day, the skin at the point of injection sloughed to the extent of a patch 9 lines by 3 lines, and one-half of the surface of the forearm became quite red, swollen, tender, and painful. Three days afterwards the pain, swelling, and redness had disappeared. The tenderness persisted until the tenth day. Serum exuded beneath the patch of dead skin, which dried up and formed a thick scab, and which fell off on the thirty-second day after the injection, leaving a depressed cicatrix.

In the succeeding experiments and cases quinia suspended in Bower's glycerine was used. The sulphate of quinia was carefully "rubbed up" with the glycerine (in the proportion of not more than gr. iv. to fʒi). The only inconvenience in the use of this mixture resulted from the fact that the glycerine is apt to dissolve the cement used to unite the different portions of the syringe. When very thick glycerine was used, it was diluted with distilled water.

Experiment III.—Injected into the right forearm half a grain of sulphate of quinia suspended in half a fluidrachm of glycerine. The only symptom was very slight pain attending the injection.

Experiment IV.—Injected into the same arm, on the same day, one grain of quinia suspended in fʒi glycerine. There was a little more pain, with some redness, which lasted a few minutes. The point of injection remained slightly tender for two days.

Experiment V.—Injected into the right forearm gr. ij quinia with fʒi glycerine. There was slight pain for five minutes. The seat of injection became prominent. At the apex of this prominence a livid spot appeared, which was enclosed in a ring of white bloodless skin, surrounding which was a narrow border of red. This persisted for only a few minutes, and was unattended by any disagreeable sensation. The next day there was no redness, pain, or swelling, and tenderness could just be detected.

Experiment VI.—Injected four grains of sulphate of quinia suspended in fʒi glycerine. The same appearances as in *Experiment V.* presented themselves. The next day tenderness barely remained.—*Medical Times.*

The Best Period of Operating for Laceration of the Perineum.

Discussion in the Gynæcological Society of Boston.

Dr. Wheeler desired to ascertain the opinion of members of the Society as to the best period of operating for laceration of the perineum. He had recently seen an extract of a few lines from a paper contributed to the *Glasgow Medical Journal* for November, 1869, by Dr. John Brinton, Surgeon to the Royal Maternity Charity, London, in which he advocates operating immediately after delivery. He narrates three cases so treated, and remarks :

"1. That the result of the recent operation is very satisfactory.

"2. That the operation is very easy, and,

"3. That it is comparatively free from danger, and is nearly painless, requiring no chloroform ; because the parts which have been torn are in an anæsthetic state, being benumbed by the pressure they have recently undergone."

What, Dr. Wheeler would ask, was the usual practice in Boston?

Dr. Martin replied that it was usual to wait till a subsequent period. He had never, however, been satisfied with the reasons ordinarily given for this delay. To say, for instance, that the lochia would produce irritation at the line of suture, was but a trivial excuse. Dr. M. related several cases where he had operated immediately. In one he had delayed twenty-four hours, and yet obtained a perfect success, the new perineum sufficing for its work in several successive confinements.

Dr. Wheeler had first operated fifteen years ago. It had been, and was still, his habit to operate immediately after the occurrence of the accident. He thought that many of his neighbors did the same.

Dr. Storer believed that the frequency of perineal laceration, even to the sphincter ani, was greatly under-estimated. He seldom now saw it save in chronic cases, as he had long since relinquished even consultations in midwifery. He was satisfied, however, that the lesion occurred, at the least, ten times where it was detected once,—accouchers failing to examine the parts after delivery had been completed. Years afterwards, the patient might seek relief for prolapsus uteri, rectocele, etc., and the state of things then first become known. He frequently had to operate under such circumstances, and the result towards effecting a restoration of the patient to health was at times very marked.

Dr. Martin believed that the accident was often owing to the careless use of forceps. This was perhaps especial likely to occur in country practice, where consultations were often so much more difficult to obtain in cases of emergency. It was often owing, moreover, to carelessness during extraction of the fœtal shoulders. He had no doubt of the correctness of Dr. Storer's statement as to the lesion not being usually detected at the time of its occurrence. He had noticed that at a late meeting of the Obstetrical Society of this city, a gentleman who had practiced some three or four years, and had had "many cases," spoke as though they had occasioned him no subsequent difficulty. As far as that was concerned, many practitioners of real experience seem inclined not to attach any importance to the lesion.. They were all of them very wrong.

Dr. Weston had frequently heard similar remarks from veteran accouchers. He agreed with Dr. Martin, that it simply showed their ignorance of the after effects of perineal laceration, unremedied, upon a patient's health.

Dr. Martin believed that the usual method of supporting the perinium, previous to and during the passage of the fœtal head. directly predisposed to rupture.

Dr. Wheeler remarked that the reason why many physicians never found laceration of the perinaeum to occur in their own practice was that they never looked for it.—*Gynæcological Journal.*

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In an Obstetrical Case, should the Physician take his Forceps with Him?

By J. C. McMechan, M.D , of Cincinnati, O.

"What gift has Providence bestowed on man that is so dear to him as his children?"—*Cicero.*

It is the grand desire of married people to have progeny. As women sigh so for children, it certainly becomes the duty of a physician to try and deliver them as safely as possible.

What has brought this matter so vividly before my mind is a case that occurred in my practice a few nights ago.

I had been engaged to wait on Mrs. M. G., in confinement, and about 3 o'clock A.M., was summoned to her bedside. She had been in labor five hours, and the membranes ruptured at two o'clock. The feet had presented, and the child was born as far as the knees. In a few minutes the child was born all but the head, and that remained in the pelvis. The usual manœuvers on such occasions were tried, but without avail. I told the woman's husband to run to my office and bring my obstetrical instruments as quickly as possible. The office was distant but a square; but what were my regrets on his just returning, to find the pulsations in the cord had ceased. The instruments were quickly applied and the child delivered. Had I taken the instruments with me, I doubt not but that the child could have been saved, for after the delivery of the body the pulsations in the cord were quite strong and natural, and only ceased after about five minutes. This is the usual time, most authors say, a child can exist in that position.

To make me regret the delivering of a dead child the more deeply, was the fact that the mother had lost her previous child, her first one, in confinement; her grief was almost inconsolable on learning that the child was not alive.

In another case, which occurred about a year ago, I was called to see a lady in confinement, and found the very same presentation as in the case above related. As the patient lived a distance from my office, I took the precaution of taking my obstetrical instruments with me. I was at the house but a short time when the child's body was born, but the head remained behind. Finding delivery in the usual way impossible, I rapidly applied the forceps and delivered; the child seemed dead, but in a few minutes it was resuscitated, and is now a large and healthy child. It was the first confinement the lady had had, and the child would certainly have been lost if I had not had the forceps in the house at the time.

A physician going to visit an obstetric case knows not what operation he will have to perform, or that he will find it necessary to interfere at all, but it is best to be prepared for emergencies. There is a great prejudice existing among the people against the use of instruments, and it is partly through fear of remarks that physicians are deterred from taking them along. Physicians, of course, are justified in being cautious and not getting the prejudices of people unnecessarily aroused, but if one child even in two hundred can be saved by their carrying a pair of forceps with them, they should do so.

About three months ago I was asked by a gentleman to see his wife, who had been in labor for a number of hours, and who had employed a midwife to wait upon her. It being about one o'clock at night, and supposing the case might be a difficult one, I took my forceps with me. On arriving at the house, I left them in an ante-room, and then examined the patient. Everything being favorable, and not requiring interference, I left, saying I would return early in the morning. I told the woman's husband that I thought his wife would be delivered naturally in a few hours, that I would leave the case in the hands of the midwife, and if she was not delivered by morning I would use the instruments.

On going back in the morning, the case had terminated favorably, but the instruments had been brought in and exhibited to the patient, and she was so indignant at my bringing them to the house, that I was dismissed from the case at once.

It is not the fashion to take obstetric instruments to the patient's house on the first visit, but most certainly *dignum et justum est* to do so.

What joy the physician brings into the house by saving the first child!

What remorse he causes by failure!

These considerations should overbalance all feelings of delicacy in a matter of this kind.

It is a well known fact that the head often remains behind in pelvic presentations, and the use of the forceps is required to save the child.

In an affair of life and death, feelings of delicacy should be laid aside, and then more children could be saved, and parents spared from much grief.—*Med. and Surg. Reporter.*

Editorial.

Cundurango—Answer to Correspondents.

We have received numerous inquiries about this drug, which we desire to answer as satisfactorily as possible. This medicine can be obtained of Wm. Peabody, Druggist, Buffalo. It is worth one hundred dollars per pound, *only*. It has been qurte extensively tried in Buffalo, and six cases have been under our own observation, though we have not advised it. We have consented to prescribe it for the gratification of patients. After trying it about one week, and observing no effects, three of the patients discontinued its use. One other could not retain it on the stomach, or any other medicine or food. One of the remaining patients thought it relieved the pain, previously very intense, but a few day's trial dissipated the idea, the pain returned and the disease constantly increases while the medicine is still continued. The remaining patient continues the use ofthe drug, and *hopes* still to derive benefit from its continued use; no positive evidences of benefit are yet observable. So fabulous a story in medicine could hardly be expected to receive any credence in the profession, and we frankly confess to a disgust with the perpetrators of the statements furnished the daily press. We have steadfastly advised poor people to let it alone until the better off ones had tested its virtues. A Physician, backed by the Vice-President of the country, and a female savage of South America, can of course, make an impression upon the poor victims of malignant disease. It is not strange, with the statements furnished the country, that such patients and their friends should have intense desire to *try* the remedy. There is probably money enough to be made out of it to pay one Physician, well, for all his professional reputation and standing, and have enough left to fully reward the Vice-President for any outside influence he might have been able to furnish the enterprise We have designed to wait for the results of complete trial before expressing any opinions upon the subject, but too long delay in such a matter is criminal. We shall answer the inquiries made about this drug more fully after longer observation, and only desire to say, that we have seen no effects from the drug whatever, and believe it inert. Our professional associates express similar views, and we deem it but just to the profession and all honest seekers for the truth, thus early to make the expression.

We find the following editorial in the *Leavenworth Journal of Pharmacy*, which we re-publish for the entertainment of our readers:

"WHAT'S IN A NAME?—High sounding titles; a six-in-hand turnout with gold mounted harness; specious pretentions—one and all are most wonderfully successful in the domain of quackery. Although "mere springs to catch woodcocks," it is astonishing how much of that kind of game is yearly trapped.

The magic power of ST.—1860—X, brought millions to the coffers of the genius who invented it. Some brilliant genius has devised a well laid scheme to enrich himself at the expense of suffering humanity by the introduction of an article for the cure of cancer. The name of the article is a taking one:—Cundurango sounds grandly when properly pronounced. It requires a peculiar twist of the tongue to give it full effect, and is all the more effective on that account. The term would be more euphonious if spelled with a *j* instead of a *d*—certainly it would be then more expressive of its object. Those who are to be conjured out of their dollars would have the satisfaction of knowing that it was a mere slight-of-hand performance. Coming from a foreign country, introduced through high official channels, recommended by one of the leading physicians of the Capitol, and endorsed by so high a dignitary as the Vice-President of the United States, it would be strange indeed if it did not have a large sale. Unfortunately, however, four of the six persons upon whom its extraordinary virtues were tried, suddenly took their departure to a foreign clime, with the mere ghost of a chance of their return, and the other two are preparing to make the same journey, determined, however, to shout *cundurango!* with their last expiring breath.

Were the humbug not so transparent, we would cry shame on its perpetrators; but with the facts before us, we are inclined to pity them for their folly. In this connection we publish the following from our Arrapahoe poet, both as a compliment to the author and as a contribution to high art:

The morning sun was shining bright
As lone upon old Georgetown's hight,
A Bliss-ful doctor, clad in brown,
Desiring wealth and great renown,
Displayed aloft to wond'ring eyes
A shrub which bore this strange device,
Cundurango!

A maiden fair with palid cheek
With ardent haste his aid did seek
To stay the progress and the pain
Of carcinoma of the brain;
While still aloft the shrub he bore,
The answer came with windy roar,
Try Cundurango!

A matron old, with long unrest
From carcinoma of the breast,
This Bliss-ful doctor rushed to see,
And begged his aid on bended knee.
The magic shrub waved still on high,
And rushed through air the well-known cry.
Try Cundurango!

The evening sun went down in red—
The maid and matron both were dead;
And yet through all the realms around,
This worthless shrub, of mighty sound,
Will serve to fill the purse forlorn,
And cancer succumb—"in a horn"
To Cundurango."

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Regular Medicine and Homœopathy.

We have received numerous communications on the above subject, all agreeing that it is quite unnecessary, and even absurd to answer or explain to medical men, the reason why physicians do not, and cannot associate with the various "ists" and "ics," or to expose to further ridicule the legal errors in the communication on the above subject, or in any way make serious lengthened reply to the paper. If our readers and correspondents will forgive us for publishing the paper for professional reading, and for suppressing their very complete and satisfactory rejoinders, we will regard the unpardonable sins of editoral life blotted out, and solemnly promise with penitence and prayer, to never again thus trespass upon their indulgence.

Appointment.

Dr. Worthington W. Miner, of Ware, Mass., of the class of 1868, at Amherst, and a graduate of the Buffalo Medical College of 1871, has been appointed Assistant Physician at the Butler Insane Asylum, Providence, R. I., and entered upon his duties in August last. Many of our readers will remember his reports of cases, last season published in this Journal, and his many friends in Buffalo and elsewhere, will be pleased to learn of his success.

Post-mortem Poisoning.

It is believed that Dr. O. C. Gibbs, of Frewsburg, whose brief obituary notice appeared in our last Journal, came to his death from *post mortem* poisoning He survived the injury since April last, and hopes of his recovery were, at times, entertained; but alas! he fell another sacrifice, self-offered in the pursuit of medical knowledge.

An Abortionist's "Diploma."

The report in the New York *Tribune* concerning a recent terrible case of homicide at the hands of an abortionist, says:

Within a few weeks a villain has been arrested in New York city for perpetrating an abortion on a woman which killed her. He put her corpse into a trunk and shipped it to Chicago. This rascal, who claims to be a doctor of medicine, formerly kept a lager beer saloon in Chatham street, and about a year ago procured a diploma from a spurious medical college in Philadelphia for $100, since which time he has been practising his profession of abortionist with wonderful success. Besides a house in Amity place, he had several others in different parts of the city and a numerous corps of assistants. This is one of the results of diploma peddling.

"Rosenzweig, the abortionist, is a large man, about 5 feet 3 inches in height, and with a piercing blue eye. In answer to the questions of reporters, he said that he obtained his diploma from a medical college in Philadelphia, paying for it $40, and that his diploma is from a Philadelphia Eclectic College."

We would be glad to get a sight of the "diplomas" of all these professed abortionists in our cities. There is little doubt that those that have any diplomas at all nearly all belong to the "$40 C. O. D." class.

We take the above from the Medical and Surgical Reporter, and have only to add that this Diploma was obtained of the firm we gave a gratuitous advertisement not long since in the remarkable correspondence recently sent us by Dr. C. P. Chamberlain, of Canisteo, N. Y. It is quite time that these swindlers were "shut up."

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Books Reviewed.

On Syphilitic Epilepsy. By Reuben A. Vance, M.D.

Dr. Vance, who has devoted a considerable portion of his time to the observation of the disease of the nervous system, has written a very interesting paper on Syphilitic Epilepsy, which we receive in reprint from the American Journal of Syphilography and Dermatology. He says that in diagnosing this disease it is of the greatest importance to obtain a complete syphilitic history and to discern evidences of the persistence of the disease. The ophthalmascope is spoken of as being very valuable in this connection, for, through it we may observe the changes in the blood-supply of the retina indicating the brain-circulation, and also the effects of the remedies. The treatment must be specific, each case becoming a matter of special study. Several cases of epilepsy are given, caused by the influence of constitutional syphilis, which were successfully treated. From what he says in these cases we may infer that the disease, under proper treatment, readily yields, even if the patient has suffered for years from it.

Plastics and Orthopedics: A Report re-published from the transactions of the Illinois State Medical Society for 1871. By David Prince, M. D.

This subject has been very ably treated by the author, and exhibits a great familiarity of the author with the subject. It is illustrated with thirty-eight wood-cuts, and is a complete report of the principles, expedients and specialities of *Plastics*,, and its mechanical appliances, in the treatment of *orthopedics*.

The late Dr. John Conolly, of Hanwell, England. By Charles A. Lee, M.D.

This is an able sketch of the life of Dr. Conolly, who was one of the first advocates of non-restraint treatments in the managing of the insane. Though dead some years, yet his teachings deserve rememberance, and Prof. Lee has contributed wisely and liberally to this object.

Artificial Induction of Labor in Uræmia. By Samuel C. Busey, M. D.

In this article, which is a reprint from the National Medical Journal, Dr. Busey considers two propositions. The first relates to the morality and safety of the operative procedure, and the second to the expediency of the proceeding in uræmic poisoning. The first was approved in 1756, and has been practiced ever since; the second is in the affirmative, on the ground, that the peril of the mother is diminished. Various comparative tables in this connection are added, thus making the paper more complete.

Minutes of the Twenty-second Annual Meeting of the American Medical Association, held in the city of San Francisco, May, 1871, pamphlet pp. 43. Price 25 cents.

Owing to some delay, caused in preparing the proceedings of the American Medical Association for the Press, the energetic permanent Secretary, Dr. Wm. B. Atkinson, has published the minutes of the same in a convenient pamphlet form. Those who desire the pamphlet may procure it by inclosing price and addressing the permanent Secretary, Wm. B. Atkinson, M.D., 1400 Pine Street, Philadelphia.

Transactions of the Minnesota State Medical Society.

This pamphlet contains addresses and reports, with illustrative cases, on the various branches of medicine, and will be read with interest by the profession.

A Treaties on the Nervous System. By WILLIAM A. HAMMOND, M.D.

The medical profession will appreciate a systematic work upon Diseases of the Brain and Nerves, since enough is already known to fill a volume of near one thousand pages with well established truth. Many of these diseases have been studied anew within the past few years, and have thus been removed from the field of fancy and wild conjecture, and placed upon well defined basis of structural change. This work embraces a wide field, including all the diseases of the Brain and nervous system. The classification of disease and the method of presenting truth, merits the highest approval, he basis of the conclusion being given in such plain detail as to carry conviction to the mind of the attentive reader. The chapter on Insanity not proportionally more valuable than all others, is yet of great interest, partly on account of the attention which is now being paid to the study of mental diseases. The members of the profession who do not make insanity a special study, will find the recent views on this subject expressed in condensed form, so as to be adapted to the wants of general practitioners of medicine. All the other diseases of the Brain and Nerves, not associated with insanity, are also treated with equal ability and extent of research. It cannot fail of appreciation with the profession, and will take rank as one of our most valuable standard works on these subjects.

Opium and the Opium Appetite. By ALONZO CALKINS, M.D.

The author of this work has given the profession, and especially the public the entire history of Opium; its commerce, statistics, pharmacology, physiology, pathology and psychology. Also methods of opium stimulation, and opium literature, longevity, immaturity and family degeneracy, effects upon age and sex, posology, qualified vincibility, reforms and failures, specific therapeia, therapeutics and hygiene. Narcotic stimuli, alcoholics, opium and alcoholics contrasted. The poppy or the vine. Opium and Cannabis contrasted, tobacco and coca. Coffee and tea in the contrast. Legislation against Stimuli, deductions, conclusions, &c., &c. The book is very instructive, and in all respects highly entertaining. Quotations, statistics, history, literature, &c., &c., constitute the staple composition of the book. The legislation upon the subject of stimulants attract our special attention, the conclusions arrived at are philosophical and logical. Temperance advocates, and general lovers of themselves and of mankind should carefully observe his facts, whether they adopt his conclusions or not, his temperance principles are of high general order, and are based upon an aggregation of facts which fully sustain his conclusions. This book should be placed in the hands of the intelligent and appreciative public as well as the profession. It is published by J. B. Lippincott & Co., Philadelphia.

Tanner on Infancy and Childhood. By MEADOWS. Third American Edition. Philadelphia: Lindsay and Blakiston, 1871.

Revised and improved works upon the diseases of Infancy and Childhood, are, perhaps, of as great value to the profession and mankind as are any books upon Medicine and Surgery. It is obvious to all extensive observers, that the diseases of Infancy and Childhood, though for the most part simple and easily known, are yet imperfectly studied, and their importance but partially understood. It is remarkable that with the care young humanity receives, that so many arrive at adult life; and when we consider what hygienic conditions attend the poorer classes in large cities, we can only look with astonishment, making ourselves almost believe that the general laws of health are altogether suspended, or even changed so far as children are concerned—that they are healthier the poorer they are fed and clothed, and the dirtier they are kept. It appears to us that this book is written upon very good common sense principles, and that with all that is known of the causes pathology symptoms and treatment of the numerous diseases of infancy and childhood is gained that comprehensive understanding of the general laws which underlie this young life, as to make this book of value to all attentive readers. It is concise, comprehensive, and complete in its teachings, and will, we believe, continue to hold rank as one of the best standard works upon this subject.

We should be glad to speak more in detail of its merits, and to show by quotation its teachings, but space will not permit. Our readers must accept our assurance that it is a good work upon subjects too much neglected.

Death of Thomas Hawkes Tanner.

Thomas Hawkes Tanner, M.D., F.L.S., M.R.C.P., died in Brighton, July 7th, at the early age of 46. He began practice in London in 1847, and since then had held several responsible appointments, and enjoyed for many years past a very extensive practice. His "Manual of the Practice of Medicine,' originally published in 1864, has gained in popularity with each succesive edition, and from a mere pocket manual has grown to a complete work in two large volumes. He was the author also of "Signs and Diseases of Pregnancy," a "Practical Treatise on the Diseases of Infancy ond Childhood," "Clinical Medicine," an "Index of Diseases," "Memoranda on Poisons," and several smaller works the papers on various subjects. The leading characteristic of his life was indomitable industry, which enabled him to accomplish a vast amount of work, though at the sacrifice of his own health. He had been suffering for several years from renal disease consequent on an attack of scarlet fever in 1854, and his death was caused by uræmia. For two months before his death he had been obliged to relinquish his professional duties.—*New York Medical Journal.*

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A Successful Method of Treating Certain Cases of Dysmenorhoea and Sterility.

By Protheroe Smith, M. D., Senior Physician to the Hospital for Women, London.

After giving the pathology of the obstructive dysmenorrhoea with the usual mode of treatment, Dr. Protheroe Smith called attention to that of dilation by bougies, suggested by Dr. Mackintosh, and the modification of it by Dr. Simpson, and his operation of incision of the cervix by the hysterotome. Dr. Pretheroe Smith's experience having suggested a doubt of the advantage of this practice, he was led to adopt the plan he now advocated in certain cases indicated by conditions which he mentions. To overcome the stricture of the os internum, he used *extension force* by means of his uterine dilator, an instrnment described and exhibited, as being particularly suitable to this purpose. To restore the os tincæ to its natural form, per speculum, he incised it laterally at the commissures of the labia. Particular instructions were given for this treatment, which, during the last twenty-five years, he had employed with considerable success in remedying both obstructive dysmenorrhoea and sterility. Six cases were cited in illustration.—*British Medical Journal.*

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The Future State of Doctors.

Terra del Fuego has been traversed by Lieutenant Masters, R. N., who has discovered that the natives believe in devils, and that they are departed spirits of members of the medical profession. The main object of their religious ceremonies is to keep these devils at a distance from them.—*Times and Gaz.*

Let the Lieutenant tell that to the marines.—*Clinic.*

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Books and Pamphlets Received.

Practical Midwifery and Obstetrics, including Anæsthetics. By John Tanner, M.D., M.A., L.L.D. Philadelphia: J. B. Lippincott & Co., 1871. Buffalo: Breed, Lent & Co.

A Manual of Midwifery, including the signs and symptoms of Pregnancy, Obstetric operations, diseases of the Puerperal state, &c., &c. By Alfred Meadows, M.D., London. First American from the second London edition, revised and enlarged with illustrations. Philadelphia: Lindsay & Blakiston, 1871. Buffalo: Breed, Lent & Co.

Handy-Book of the treatment of Women's and Children's diseases, according the Vienna Medical School, with Prescriptions. By Dr. Emil Dillnberger. Translated from the second German edition. By P. Nicol, M.D. Philadelphia Lindsay & Blakiston, 1871. Buffalo: Breed, Lent & Co.

Essay on growths in the Larynx: with reports, and an analysis of one hundred consecutive cases treated by the Author, and a tabular statement of all published cases treated by other practitioners since the invention of the Laryngoscope. By Morell Mackenzie, M.D., London, M.R.C.P., with numerous illustrations in Chromo-Lithography and Wood Engraving. Philadelphia: Lindsay & Blakiston, 1871. Buffalo: Breed, Lent & Co.

The Physicians Prescription Book, containing lists of terms, phrases, contractions and abbreviations used in Prescriptions, with explanatory notes, the Grammatical construction of Prescriptions, Rules for the pronunciation of Pharmaceutical terms, a Prosodiacal vocabulary of the names of Drugs, &c. By Jonathan Pereira, M.D., F.R.S. Fifteenth Edition. Philadelphia: Lindsay & Blakiston, 1871. Buffalo: Breed, Lent & Co.

Cancer: its classification and remedies. By J. W. Bright, M.D. Philadelphia: S. W. Butler, M.D., 1871.

Atlantic Monthly, Educational Monthly, Advance, N. Y. Observer, Newspaper Reporter, Phrenological Journal, Missionary Herald, Peterson's Musical Monthly.

Electrolysis, and its application to the treatment of disease. By A. D. Rockwell, A.M., M.D. New York: D. Appleton & Co.

Constitution and By-laws of the Monroe County Medical Society.

The Physical Diagnosis of Brain Disease. By Reuben A. Vance, M.D. New York: Wm. Baldwin & Co.

Report of the Resident Physician of Brigham Hall, a Hospital for the Insane, for the year 1870.

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Original Communications.

Thesis.

ART I.—*Excisions Involving the Joints of the Upper Extremity.*—Reports of Illustrative Cases. By W. W. MINER, Class of 1870-71.

In presenting the following history of cases which embrace excision, as involving all the joints of the upper extremity in which excision is generally a desirable operation, I have the pleasure to say that all the cases here mentioned have come under my own observation, and that all except one of these cases have occurred during the past sixteen months, and in the practice of my uncle and preceptor, Dr. J. F. Miner. For permission to bring forward this report, as well as for clinical instruction upon the cases, it is proper for me to acknowledge my indebtedness to the surgeon I have already mentioned. The case involving the carpal articulations is taken from the practice of my father, Dr. D. W. Miner, through whom it was brought to my notice.

The limits of a thesis forbid the general consideration of the propriety of the operations herein described. I endeavor only to present in the reports of each of these cases some one or more points which is there given especial prominence and interest, and concerning which exact knowledge is not already possessed. In the case involving the inter-phalangeal articulation of the thumb, it may, perhaps, be found that some originality in the operation there performed does exist, or that some value in the illustration, afforded by an actually occurring case, renders its report worth presentation here. Without further delay permit me to call attention to the following cases:

I.—*Excision of the Humerus, including the Shoulder Joint.*

J. Packard, aged 22, living at No. 169 Cedar Street, Buffalo, while riding in a buggy, near Williamsville, on a hunting excursion, accidently discharged the contents of his shot-gun into his left shoulder and side. Arriving home at evening, his injury and condition was such that all operative interference was delayed until the next day. It was found that the upper third of the humerus had been completely shattered, and that the soft parts on the internal side of the arm were extensively lacerated, filled with shot, scorched and discolored by the discharge of powder. A wound six inches in length and three inches wide had been made in the direct line of the the intercostal space, and its depth was such as to expose plainly two ribs and also the intercostal muscle between them, which rose and fell with the motions of respiration. The periosteum of the outer surface of the exposed ribs had been carried away to a slight extent. Dr. Miner, in consultation with the family physician, Dr. Strong, and in the presence of several other physicians, decided that excision of the head of the humerus and of so much of the shaft as was required, should be undertaken.

I may here state that, although the patient was at the time of the injury in a condition of perfect health; still death seemed an almost necessary sequence. This was liable to occur from several causes, namely: from general shock, from perforation of the pleura, from pyæmia and from secondary hemorrhage. Never have I seen any similar case in which such imminence and multiform dangers threatened the patient. It seemed as though no operation but amputation could be of avail, or could be anything else than eminently hazardous. The only method by which fatal pyæmia could be avoided would appear to be by amputation, which would leave a clean surface as the site of the suppurative process. The statistics of cases of gun-shot injury to the head of the humerus as presented by the surgical reports of the War of the Rebellion, give 32.48 per cent. as the mortality after excisions of the head of the humerus, and 39.24 per cent. as the mortality after amputations at joint, thus giving the small difference of only 6.76 per cent. in favor of excisions.

Excision of the head with the upper and middle two-thirds of the humerus was in the present instance performed. The periosteum of the humerus was separated from the bone and not removed by the operation. A single handful of shot of about two ounces weight was removed from the tissue of the arm during the operation. It was not thought that then all the shot was removed. On the next day after the operation the patient was in such a state of depression that he did not rally to give any signs of recovery from shock until forty-eight hours after the operation was performed. Anodynes, stimulants and tonics, were used with the greatest care during the first three weeks from the operation, and were also continued during convalescence. Exfoliations of bone separated from the ribs on the third week after the injury. Antiseptic dressings, with careful and frequent cleansing of the parts, were, of course, the important means of local treatment. A straight splint was used to keep the parts in place and to allow of the convenient moving of the limb.

The patient gradually recovered, and this fact can be accounted for only on the ground that he was in perfect health at the time of the accident, and was very assiduously cared for afterwards. The injury was in all respects severe to the utmost extent. The last visit made the patient by Dr. Miner was on September 20th, three months after the injury. By November the patient had so nearly regained his strength as to present himself at the Winter clinic before the class of this institution. The result was as perfect as the injury was severe. The usefulness of the fore-arm is in every respect perfect. Very little motion of course can be made in the arm, which, however, shortened only one inch, while the extent of the excision was six inches. Three inches and one-half of bone have been replaced by periosteal reproduction; one and one-half inches are occupied by a ligamentous attachment between the joint and the excised extremity; this, with the shortening, accounts for the present condition of the arm. The observation made respecting the teaching of the case is, that a gun-shot injury of the most severe character does not increase the extent and danger of subsequent suppuration over that succeeding a simple contused wound, to such a degree as has been believed: again, the extent to which the periosteum, if uninjured, will reproduce bone is here finely illustrated.

CASE II.—*Excision of the Ulna involving the Elbow.*

Wm. J. Leech, aged 32, residing on Carroll Street, Buffalo, while employed as brakeman on the Lake Shore R. R., was, on the fifth day of November, 1869, caught between car couplings in such a manner as to crush the upper third of the ulna, and to lacerate to some considerable extent the soft parts on the posterior part of the fore-arm and immediately surrounding the comminuted ulna. The injury was received on the road some little distance from Dunkirk. The physicians who were called at Dunkirk advised immediate amputation of the arm. The patient preferred riding to Buffalo, where he might obtain further advice as to the necessity of amputation. Though the injury occasioned somewhat remarkable comminution of bone, and some considerable laceration of tissue, still it was found that the ulna was alone the seat of fracture, and that circulation and sensibility in the hand and forearm was not in any particular degree affected. The longitudinal opening in the integument was lengthened by incision so as to extend as far down as did the fractured bone. The upper and middle thirds of the ulna were removed by excision, while the radius was left intact. The limb was afterward placed upon an angular splint whose obliquity was varied as was necessary. Though the shock of the injury was very considerable, still the attempt at the preservation of the limb gave the patient courage, which was a valuable adjurant in his recovery. Carbolic acid water dressings were assiduously employed, and the cleansing of the parts with water was carefully and regularly attended to. Suppurative discharge was abundant, and to this, from the position of the wound on the posterior part of the forearm, there was afforded ready exit. Visits to the patient at his house were required for a period of six weeks, after which time he came regularly to the office, where the last dressing the case received was on the 29th day of December, only fifty-four days after the receipt of the injury. The result of the excision is a most satisfactory one. The motions of the fore-arm and hand are admirably retained. The man is now at work in a stove manufactory in this city, and his employer states that he is able to notice no difference in the efficiency of this workman from that of his fellows. The case goes to show that injury to the bony structure of a limb, though it involve two-thirds the extent of that bone and implicates its articular extremity, is of not so serious consequence as if the same extent of injury involved an equal extent of surrounding soft tissue. This conclusion was very strongly affirmed by a case of contusion of the soft parts of the fore-arm of the same extent as was that of fracture in the case already narrated which also was without co-extensive contusion of soft tissue. The patient with simple contusion and without fracture died, while that with fracture unaccompanied with co-extensive contusion was at no time very dangerously ill. The maxim which seems to be in process of adoption by surgeons is:—*Never amputate a limb for simple injury to its bony structure.*

CASE III.—*Excision of the Extremity of the Radius involving the Wrist joint.*

Joseph Humbert, aged 18 years, living at No. 56 Pratt Street, Buffalo, on the 22nd day of September, 1870, while working at the Union Iron Works, had a heavy iron weight fall upon the fore-arm of his right hand near its articulation with the wrist. The force of the blow was such as to crush the lower third of the radius into many fragments, and to so thoroughly contuse the muscular tissue as to fully expose the radial artery and nerve,as well as the extremities of the radius and ulna. The wound extended from the wrist-joint about four inches upward towards the elbow, being confined to the inner surface of the fore-arm. Dr. Green, who was first called to attend the case, requested Dr. Miner to advise as to the treatment to be instituted. Having induced anaesthesia it was found that the radial artery was not occluded, but that the circulation in both radial and ulna arteries was to a good degree intact. The principal feature which rendered doubtful what was the proper course of treatment was that the soft parts just above the wrist-joint were so severely contused that gangrene, or pyæmia seemed imminent to their retention.

However, excision of four inches of the comminuted extremity of the radius was made; the ulna was left of its full length although it had been more or less separated from its surrounding soft parts for nearly the whole of the lower third of its extent. In the operation considerable care was taken in removing thoroughly the numerous fragments of bone from the wound so as to lessen as much as could be possible the extent of the subsequent suppurative process. The limb was fastened upon a straight splint by means of bandages applied to the hand and to the upper part of the fore-arm. The injured parts were left entirely open, being dressed with carbolic acid water cloths. The suppuration which followed was, of course, of great extent, still the parts gradually took on healthy action, and in the space of about ten weeks were fully reproduced. In order to preserve motion at the wrist, the splint was removed at the end of the fourth week and the patient was enjoined to make use of passive motion of the wrist. As the patient was somewhat of an imbecile, no efforts whatever on his part could be induced. The splint was again applied to prevent the turning of the hand by contraction on the side of the excised bone. The patient now has a hand which presents a better appearance than an artificial one would be. It is of questionable utility however, as the patient has persisted in making no effort at motion whatever since the receipt of the injury. The case is quite remarkable, in that it shows that a crushing weight may fall upon the fore-arm at its junction with the wrist with such force as to break into fragments its bony structure without necessarily producing sufficient degree of contusion of the soft parts as to cause their destruction.

CASE IV.—*Excision of Bones of the Carpus.*

Patrick Donnehue, aged thirty-four, living at Ware, Mass., while tending a carding machine in a cotton mill, in December, 1869, received a severe crushing force upon the carpal and metacarpal bones of his right hand. The external wound was entirely upon the dorsal surface of the hand. Dr. D. W. Miner was called to the charge of the case. Amputation seemed to be inevitable. With the idea that secondary amputation might be made, and that by temporization, opportunity of observing the natural tendency of the injury might be gained, the hand was extended upon a straight splint, upon which it settled down like a plastic mass. Such few fragments of bone as were to be easily detached, were removed. Dressings of strong carbolic acid water were carefully and continuously applied for a period of six weeks. The suppuration which took place was of an active character, and the pus formed emitted a very strong and plentiful odor. The hand, however, after some three weeks healed over, and the result proves that a very useful member was preserved by the treatment which was pursued. The particular lesson given by the case is, that an injury of such severity as produce fracture of the carpal bones, and of such extent as to involve nearly all the articulating surfaces of the carpus, may not result in such inflammation or suppuration as to destroy the parts involved.

Case V.—*Excision of the Extremity of the First Phalanx of the Thumb.*

Jacob Gilbert, 18 years of age, residing at No. 30 Hollister Street, Buffalo, on the 16th day of November, 1871, while attending a "Yankee Whittler," used for the manufacture of cigar boxes, inflicted a severe injury to the thumb of his right hand. On examination, it was found that the phalangeal articulation and extremity of the first phalanx of the thumb was shattered into several fragments. The integument and muscular tissue of the lateral surfaces of that bone were more or less completely severed. The tendons of the extensor and flexor longus pollicis were neither of them completely divided, though the utility of the latter was probably destroyed. The arterial supply to the extremity and last phalanx of the thumb was thought to be not altogether cut off, though it was doubtful whether the supply was adequate to sustain the vitality of that part. In the treatment of the case deliberation was required, notwithstanding the fact that injuries affecting the digital extremities have all been considered, until recently, as of very trifling importance. The injury was sufficiently severe to present the general indications for the operation of amputation. Had the injury been one involving either of the fingers instead of the thumb, amputation of the wounded extremity would even then have been made without great hesitation. Any one of the fingers can be dispensed with without seriously disabling the hand; the thumb, however, is indispensable in the performance of its common functions. But a very limited number of objects are to be grasped by the hand

and fingers alone, and the grasp thus obtained is comparatively a very weak one, as is easily demonstrated. The ability to seize an object projecting towards one is only to be had through the means of two outwardly projecting extremities : this ability in the hand increases, to a certain extent, with the length of the finger and thumb. *A long thumb then, though it be a stiff one, is an organ of the greatest value.* Brevity of the thumb is accompanied with a corresponding abbreviation of the functional power of the hand. The course to be then pursued was decided accordingly. The ordinary operation of excision was performed upon the digital extremity of the first phalanx of the thumb. The loose fragments of the articulating surface were removed, and the sharp pointed extremity of bone smoothed off with bone forceps. The two phalanges were then left in contact with each other with the desire that firm anchylosis between them should take place. The principal incisions were closed with stitches. A carbolic acid, water dressing was loosely applied to the parts for about a week, when the purulent discharge already showed some abatement. A strip of firm adhesive plaster was then wrapped spirally about the thumb to serve as a splint to keep the bones in a correct line with each other, as they seemed inclined to unite at an angle. Daily cleansing of the parts with soap and water was performed by the patient, as the adhesive plaster splint formed no obstacle whatever to the examination and dressing of the granulating wound. By varying the tension brought to bear with with the adhesive plaster splint, the bones at length were brought into perfect line with each other, and complete anchylosis was obtained in six weeks from the time of the injury. The shortening which was caused is only one-half an inch, and, though motion in the last joint of the thumb is lost, that of every other muscle of the thumb is retained. In short, the result was equal to the most sanguine expectations.

Gross says that, "excision of the head of the phalanx of the thumb has sometimes been practiced," but I have nowhere been able to find this operation of excision of the inter-phalangeal articulation of the thumb instanced or described. Respecting the treatment of the phalangeal articulations, Gross continues to say—" It is never desirable to exsect any of the digital phalanges." It seems probable that the superior importance of this operation of excision in the phalangeal articulations of the thumb to the same operation in the phalanges of the fingers escaped notice or especial mention though Erichsen, in his latest edition, quite advocates conservatism in the treatment of injuries of the thumb.

However that may be, the result which has just been mentioned as occurring in the present instance is such as to determine unquestionably the eligibility of the operation which was here instituted.

ART. II.—*Abstract of remarks on Diseases of the Ear and their Treatment.* By DR. CHARLES E. RIDER, before the Rochester City Medical Society, September 4th, 1871.

At the present time there exists considerable activity in Otology. In Germany two journals devoted to this subject are now published, and there exist in the German language several complete treatises on Aural Surgery. In our own country, Dr. Knapp of New York edits a journal of Ophthalmology and Otology, and we have an American Otological Society, at whose annual meeting many interesting facts and theories are advanced. The published proceedings of this Society furnish to the profession a condensed summary of the advances which have been made during the year in this department. We also have a few men, as for instance, Dr. J. Orne Green of Boston, who devote their entire time to the investigation of diseases of the organs of hearing.

We may for convenience study the disorders of hearing as they affect the external, middle, or internal ear.

1st. Diseases of the External Ear—Eczematous Inflammation. We meet this affection quite frequently, especially among badly nourished children, often existing just back of the auricle.

Locally, I apply the following Ointment:

℞ Yellow oxide of Mercury, - - -	gr. xx.
Simple Cerate, - - - -	℥j
M.	

Internally, I give good nourishment and tonics. Where the Eczema is rather dry, the best remedy perhaps is Fowler's Solution of Arsenic,—drops x, 3 times a day; but where the Eczema is more moist, I have used the following formula with much benefit:—

℞ Nitric Acid, - - - - - -	ʒj.
Epsom Salts, - - - - -	℥j.
Water, - - - - - -	Oj.
M.	

Give a tablespoonful three times a day.

Otitis Externa (diffuse otitis), commonly shows itself by an exfoliation of cuticle, with a slight purulent discharge. Sometimes, however, there may exist merely redness and dryness of the membrane, without any discharge; or even the disease may show an absence only of the normal amount of cerumen. For this trouble, we must correct any constitutional vice. Astringents are indicated for local use.

Furuncular Inflammation.—This affection is extremely painful and persistent, and often very difficult to cure. As soon as one begins to push up toward the centre of the meatus, immediately puncture it with a sharp, narrow bistoury; this generally relieves the pain; hot fomentations may follow. Dr. Von Troeltsch recommends the use of arsenic in this disease.

Dr. W. W. Ely has failed to obtain benefit in these cases by freely administering quinine and producing cinchonism; but where the severity and number of these furuncles are excessive, he has seen the following treatment invariably break up their course:—

℞ Hydrargyri Chloridi Corrosivi, gr. j. }
Fl. Ext. Sennæ et Jalapae, ℥j mx. } s. ʒj. ter die.

Accumulation of Inspissated Cerumen.—Against this we have no prophylactic, and if removed, it will usually re-accumulate at intervals of a year or more. With a syringe, as for instance, Mattison's, *gently* throw into the meatus a continuous stream of warm water; this will generally soften and wash out the mass. Always, ere any treatment is used, be sure that there is an abnormal amount of wax present; as injections of even warm water in a healthy ear may cause injury. Never use any instruments to remove the cerumen, as the membrana tympani is very easily injured.

Foreign Bodies in the External Meatus.—Always first examine carefully, to ascertain if such foreign body is in the meatus. In nine cases out of ten we shall find nothing present, as it is very difficult to introduce a foreign body into the meatus. Then remove with the syringe and warm water if possible, if not, use any suitable instrument, but only under the eye. Never introduce any instrument unless the eye sees its every motion.

Ear Ache.—Make warm water applications, or hot chamomile fomentations.

2d.—The Membrana Tympani is seldom diseased alone; but i often involved in inflammations occurring in the external, or middle ear.

3d. Diseases of the Middle Ear.—The cavity of the middle ear is lined by mucous membrane, which is a continuation through the eustachian tubes of that of the pharynx. Inflammation of this membrane is by far the most common disease of the ear.

Acute Otitis Media.—Almost every one, at some time, suffers from one or more slight attacks of otitis media. It is in fact a "cold" in the ear. We have slight pain, redness of membrana tympani, slight deafness, sensation as of water in the ear. Therapeutically we treat it as we would a common cold; keep quiet and apply to neck and feet derivative remedies.

Chronic Otitis Media.—This comes on very slowly, increasing very gradually; may result from repeated attacks of acute inflammation, but more often is slow and chronic from its inception. In In this complaint quite frequently the patient does not notice any trouble until the membrana by repairing is much thickened, and the hearing considerably impaired. If the hearing progressively grows worse, and if it has no remissions or periodical seasons of comparative improvement, we have but little hope from any treatment, as any and all therapeutical measures seem to fail in improving hearing.

Subacute Inflammation.—We may, however, speak of what we would call Subacute Otitis Media. In this form we have repeated attacks of acute inflammation, each leaving the ear worse than it found it, and although perhaps to a skilled observer the membrana tympani may appear somewhat less thickened than in the last described disease, still the diagnostic distinction is found in the fact that the hearing varies, being sensibly better at some times than at others, and in this variety treatment is often very beneficial, perhaps even curative. Here if we find coexisting naso-pharyngeal catarrh the use of the atomizer is indicated. Probably the best remedy to use therewith is a saturated solution of Chlorate of Potassa. Also we frequently are obliged to use the Eustachian Catheter. (I much prefer the hard rubber Catheter, to which by heat any desired curve can be given). Its use is not a painful, but is often an exceedingly delicate operation; as we so frequently meet with Septa nasi, which are so bent that it is very difficult, almost impossible, to introduce it successfully. Also in conjunction with the Catheter, or Politzer apparatus, we often find advantage in throwing up medicated vapours; as that of Tr. of Iodine or Tr. of Iron; and even in blowing up finely powdered Alum or Iodoform. I consider it however more than dangerous to try to throw up solutions into the middle ear

Purulent Otitis Media.—Often a sequela of exanthematous diseases, and frequently a result of other irritating causes, in those inheriting bad constitutions. The discharge is oftentimes very offensive, and the disease is always a dangerous one. Often it causes necrosis of bone, and may go on to form fistulous openings through the mastoid bone, or even into the cranial cavity; and hearing is always more or less impaired, and that permanently. Treatment.—While we correct any constitutional vice, and also as a rule administer tonics, our therapeutical reliance is mainly placed on the local use of some of the Astringents; Alum is the best, then come Sulphate of Zinc, Sulphate of Copper, and Nitrate of Silver. When in the course of this disease we have deep seated, persistent pain, we may infer that the mastoid cells are invaded, and be called on to trephine the mastoid process. In purulent disease of the middle ear I must strongly insist on the necessity, that the physician should apply the local treatment personally; because no amount of instruction will enable the patient himself, or his friends, thoroughly to cleanse out the ear and apply the remedy. Also, after perfectly cleansing the ear by warm water, he must keep the Eustachian tube open; thus he can blow through the medicated solution after its introduction into the ear, and thus secure its application to every point of diseased membrane—on which contact the efficacy of our treatment *alone* depends. Occasionally also in this trouble, after the discharge is stopped, we find that artificial ear drums decidedly improve the hearing. If we find quite a large aperture in the ear drum, we must not despair; as in children, and especially in cases of recent date, even large sized apertures are frequently filled up by a cicatricial tissue; and the hearing eventually becomes greatly improved.

Inflammation of the Eustachian Tube.—This is often the prominent trouble among children. We must never, however, allow these tubes to remain closed and impervious to air, since as a result by rarefaction, or absorption, of the air in the middle ear, we allow the Membrana Tympani to become deflected inwards, and deafness more or less to supervene. We treat this disease much the same as we would naso-pharyngeal catarrh, or disease of the middle ear, and usually with marked benefit. In addition, however, to other treatment, as often as every second day, we inflate the tube by the catheter or Politzer's bag.

Tinnitus Aurium.—This symptom is of varied etiology, of the most frequent, persistent, least understood, and least amenable to treatment, of any of the features common to diseases of the Ear.

3d. Diseases of the Internal Ear.—Dr. Kramer of Berlin declares that whereas 30 years ago he diagnosed 50 per cent of all diseases of the ear to be those located in the Internal Ear (i. e. nervous disorders of hearing) he is now persuaded that we meet with this class of troubles in only four cases in a thousand. Nervous deafness is indeed rare, and as the occulist has his amaurosis as a refuge, so the Aurist, when through ignorance or when by careful examination he can discover no change in the ear sometimes hides his lack of knowledge by calling the case nervous deafness.

In conclusion, allow me to read a few selections from the last Journal of the American Otological Society:

1st. Account of an inflammation of the external Meatus, caused by the presence therein of the Aspergillus Glaucus—by Dr. John Green.

2d. Description of a new form of Eustachian Catheter—by Dr. Noyes.

3d. An article in relation to inflammation of the Mastoid process, occurring in the course of chronic disease of the Ear—by Dr. Noyes.

Dr. Rider exhibited various instruments for examining and operating upon the ear. He recommended the use of diffuse sunlight, collected by means of a concave mirror, and of Wilde's Silver Speculum.

Society adjourned.

CHARLES S. STARR.

ART. III.—*Abstract of the Proceedings of the Buffalo Medical Association.*

BUFFALO, October 3, 1871.

The President in the Chair.

DR. CRONYN reported a case of great interest to the profession—a gun-shot wound of the head, the ball being carried eight years in the brain. Eight years ago was called to attend a lad fourteen years of age, who had received a ball from a gun which entered at the internal angle of the left orbit,without injuring the eye, passed through the left orbital plate of the frontal bone and onwards into the brain. The ball could be followed with a probe directly backwards and felt where it had lodged, four and one-half inches from its point of entrance. The wound closed and the boy enjoyed very good health till six months ago, when, making an assault on a neighboring farmer, he was struck with a hoe on the head, which made a scalp wound from which there was considerable hemorrhage. The wound was properly dressed, but a short time after he was taken with convulsions, and died. A coroner's investigation was had and an autopsy made. The inner table of the skull was a little depressed and there was some effusion of serum and a little matter. The ball which he had received was found between the posterior lobes of the brain and the cerebellum at the tentorium cerebelli. There was no indication of the track through the brain and it was covered by a false membrane and suspended by a small pedicle. After receiving the gun-shot wound the patient was unconscious four days; then became conscious but could not speak; was also paralyzed for a time. After his recovery, so as to resume his studies at school, he was obliged to learn to read anew, though at the time of his injury he could read well, but his knowledge of figures was not the least impaired, being able to cypher as well as before or better. His disposition was changed, being very easily irritated and had little control over his passions.

DR. ROCHESTER remarked that this was an interesting case, particularly at the present time, for a trial for murder is soon to occur here, that of Kelley for murdering Rosenfelt on Michigan street, in which the defense will claim that Kelley was not responsible for his actions. Some time ago it is said he received an injury of the head from a falling tree, and since that time when in liquor or excited he becomes wild and ungovernable. The point raised is an important one in its bearing in criminal cases and many members of this association will probably be called on to express their opinions on it.

Dr. LITTLE mentioned a case somewhat similar which occurred about two years ago. A passenger on one of the railway trains of this city suddenly became insane and stabbed two fellow passengers and then jumped into the canal. He made a post-mortem section of the head and found ulceration and suppuration of the brain.

Dr. MINER related the case of the young man Hawks, who accidently shot himself in the head about two years since. The ball is still in the head, and it appears from Dr. Cronyn's report may possibly be in the brain; though he had never believed it, but supposed it was turned from direct course and lodged in the bones of the face. Prof. Steele, of St. Louis, formerly Demonstrator of Anatomy here, has recently written a paper on diseases and injuries of the brain, in which he asserts that in all severe injuries of the brain the mind is more or less impaired. He mentions the well known case of the quarry-man through whose head the tamping iron was blown by an accidental discharge of blast, and states that contrary to all the reports which have been circulated, his mind was much impaired. He regarded Dr. Cronyn's case as having many points of great interest.

Dr. ROCHESTER reports the following case of placenta prævia. Six months ago I was engaged to attend a lady in her second confinement. Two years before, while in Brooklyn, she was delivered of her first child after a very severe labor, and some of her friends had doubts as to her being safely delivered a second time, though the patient herself shared none of these fears. Ten days before the labor came on I was called to see her on account of hemorrhage. Found the os slightly dilated, and though suspecting that I had a case of placenta prævia, did not deem it prudent to attempt to determine the point positively by examining the os internum. Owing to the thinness of the abdominal walls I was able to determine accurately the position of the child, but could not hear the placental souffle. This tended to confirm the opinion I had formed of the case. .There was no more hemorrhage till labor occurred. On the night of the labor, I was called by her husband at 8 o'clock to attend her. Found the os a little dilated and soft. I at once applied the tampon very firmly and also a bandage over the fundus of the uterus; by these means having perfect control of hemorrhage. Sent for Dr. White as counsel. Gave her half grain of morphine. She was pale and very anxious owing to alarm, some one having told her that she had placenta prævia and would not recover. The pains continued rather strong and regular, though she fainted twice notwithstanding stimulants and nourishment were freely given. I could not understand why she should be so weak and faint and knowing that she would not live long if not relieved, determined to deliver her. I called for Dr. White who was spending the night in the house, and while he administered a small amount of chloroform I introduced my hand through the placenta, seized the feet and delivered a living, healthy child. I was not over five minutes making the turning and delivery, and not over four ounces of blood were lost by the patient. The tampon controlled the hemorrhage perfectly during the labor, as not over half an ounce of blood was on it when removed. After delivery the foot of the bed was raised and every effort made to revive the patient, but unsuccessfully, for she died two hours after delivery. We were at a loss to account for her death as but a very small amount of blood was lost. The next morning, however, the mystery was solved. The nurse on going to the water closet found it half full of clotted blood, the blood being 10 or 12 inches in depth. The patient, before I was sent for, went to the water closet, and while there, supposing that she was passing urine, passed this large amount of blood. This explained her weak and faint condition during labor, and her death afterwards. Dr. R—— thinks that there is often more blood lost in these cases in this manner than is supposed. There was only a little oozing after delivery which was controlled by ice in the vagina.

Dr. Wyckoff related a case to which he was called and delivered a five month child, one week ago last Friday. The patient has had two miscarriages before. Several times during this pregnancy she had hemorrhage, at first a week apart, then more frequently, and lately she had bled a little every day. After four hours of pains she miscarried. The placenta was not entirely over the os, but at one side, and presented a remarkable appearance, A portion, one inch in breadth and six inches in length was softened and putrid. This condition of the placenta explained the frequent attacks of hemorrhage during pregnancy. She has been very sick since delivery, having had metritis, peritonitis, &c., but is recovering.

Dr. HAUENSTEIN stated that he had attended two cases of placenta prævia since his last report of his cases. The first one was attended by a midwife for four days before he saw her and had lost a large amount of blood. She was very feeble, uterus considerably dilated; on examination found the os covered by the placenta. The head had not engaged so I detached the placenta, ruptured the membrane and delivered with the forceps. The placenta in this case was not centrally implanted over the os, but more to one side. The second case was complete placenta prævia. I turned and delivered. There is great danger in these cases from post-partum hemorrhage, owing to the lower part of the uterus not contracting sufficiently to close the mouths of the uterine blood vessels.

Dr. MINER had seen, since the interesting report of so many cases by Dr. Hauenstein, one case of *placenta prævia* in connection with Dr. Mixer. It was a rare, and to him up to that time, an unheard of placenta; the entire womb was covered by placenta, the os the same as elsewhere. There was hardly to be found any membranous portion, a small place at the superior part was thin and seemed like the usual membrane. Over the entire surface it was placental and evidently attached throughout to the walls of the uterus. The case resulted favorably to both mother and child. Child was turned and delivered after waiting for the os uteri to become fully dilated. Dr. Miner also spoke of a case of midwifery he had recently attended where labor was natural and at full period. The mother was remarkably well for the first three weeks when she commenced to complain of pain in back and lower bowels. Thinking she had been too resolute and up too much, he advised horizontal position and rest. Next morning there was hemorrhage with expulsion of larges masses of coagulated blood. He regarded this as an unusual occurrance at that length of time after delivery.

Dr. **Gay** remarked that the case of Dr. Rochester was interesting and the treatment proper. He, however, thinks that turning by introducing the hand into the uterus through the placenta, is not the best method of procedure in the majority of cases of placenta prævia. He believes that the method advocated by Barnes of London, when the head presents is best; the placenta should be detached, the membranes ruptured and forceps applied, and the delivery at once effected. This at once stops all hemorrhage. There is most danger of post partum hemorrhage in these cases. Was called a few years since to attend a case of placenta prævia with Dr. Storck; delivered by turning, but the patient afterwards died of peritonitis. Thinks that when a patient has lost a large quantity of blood before being seen, that the bleeding should be controlled and time given for the patient to rally before attempting delivery.

Dr. **Cronyn** thinks that there is no doubt that death in the majority of these cases results from hemorrhage. He would tampon and apply a bandage over the fundus of the uterus and thereby have complete control of any hemorrhage, and when the os was sufficiently dilated or dilatable would introduce the hand through the placenta and deliver by turning. This method has the sanction of Simpson. Barnes' method cannot always be employed. It is easy to turn when the waters are unruptured. Delivering with forceps as Dr. Gay recommends will answer when the head presents, but in these cases would use tampon and bandage to control hemorrhage. Every case in fact has its appropriate treatment. When one side of placenta has been detached would give quinine with ergot. Has lately been using quinine instead of ergot and has been pleased with the result.

Scarlatina, Typhoid fever and derangements of the bowels, were reported as prevailing.

Adjourned.

W. C. Phelps, *Secretary.*

ART. IV.—*Clinical Lectures upon Surgical Cases in the Buffalo Hospital of the Sisters of Charity.* By PROF. J. F. MINER.

Reported by Louis Brecht, member of the class of 1871–72.

GENTLEMEN,—It will be of greater importance and value to you to notice with care the cases which are more apt to present themselves in your every-day practice, and are known under the name of Minor Surgery, than the rarer, and what you might naturally regard as the more interesting capital operations of Surgery. I shall, therefore, take the greatest pleasure in showing you such cases as come constantly under our care, and such as will be your chief occupation as Surgeons. Upon your aptness in the management of such cases as we present this morning will largely depend your future success and reputation as practical Surgeons.

CASE I.—*Enchondroma.* Dr. Niemeyer, of Canada, who is on a visit to us for a few days, has kindly presented you with an interesting pathological specimen called Enchondroma. This is the name applied to a cartilagenous growth, which holds an intermediate place between the fibrous and oseous tumors. These tumors, however, are not alike either in character nor form. They may be gelatinous, and have the appearance of containing matter, or may be hard, smooth and elastic; they may be round or flattened. Their growth is attended with no pain. They occur mostly in young people with a rickety constitution and scrofulous diathisis They may occur in any part of the body; more frequently however on the fingers and toes, and are generally attached to bony walls. The present specimen is the left fore finger, amputated for this affection. After making a section through it, we find it to be homogeneous, consisting of a firm, fibrous, whitish mass. These growths may appear in the testes, mammary or parotid glands in which case they are more liable to undergo degeneration and become malignant. At times, these tumors attain an enormous size. A specimen of this character is mentioned in Gross's Surgery, in which the shoulder and clavicle were involved, weighing thirty-one pounds. They are said to break down occasionally, causing deep cavities. Occasionally the entire system becomes affected, and may have the appearance of encephaloid disease. The treatment may be either extirpation of the tumor, or amputation of the entire member thus affected. The latter is generally resorted to as the disease is less liable to return.

Case II.—*Cataract.* Mrs. Seely, a private patient of mine, aged 45, has consented to appear before you, that you may observe the result of an operation for cataract. It is now eight weeks since the operation was performed. It was made by what is called Von Graefe's method of linear extraction, modified a little. Both eyes were operated upon at the same time, and I am happy to say, the result is entirely satisfactory. You will notice that the field of vision is entirely clear; that the small incision made for the extraction of the lens at the upper margin of the cornea is but slightly visible and that the iris is a little attached at this point. The patient can read No. 6 of Jaeger's type, by aid (of course) of proper cataract glasses. A few months hence her vision will doubtless be more distinct. The extracted lens in all cases must be replaced by artificial lens, or cataract glasses. Distant objects may be seen more distinctly than near ones but distinct vision of near objects require glasses. They should, however, never be used until at least two or three months after the operation; early and protracted use of the eyes is apt to cause congestion of the retina and is unsafe.

Case III.—*Inverted Toe Nail.* John McNamee, aged 18, dresser in the hospital, suffers from an inverted nail on his first toe. The nail has been removed before and this is its second growth. It has an unhealthy stubby appearance and has an ulcerating surface underneath and again requires removal. This condition of the nail is of greater importance than it seems; it actually disables the sufferer, often for a longer time than a broken leg, and is very vexatious and painful. The patient is ready to undergo any operation you may propose, even amputation of the toe; the latter, however, is quite too radical for ordinary purposes. Various plans of procedure have been tried to effect a cure, such as Per Sulphate of Iron introduced between the flesh and nail which tans the flesh, so that it will separate, or form a sort of slough, and has been highly spoken of; crowding cotton down by the side of the nail to keep the flesh separated from it; drawing the flesh from the nail by means of adhesive strips, and other methods have been recommended as paliative but have generally proved to be of only temporary value. Extraction is by far the most efficient method of treatment. By throwing on the toe the spray of ether or giving chloroform in the usual way the operation may be easily and painlessly performed. In a few days a scale will form which will answer every purpose of a nail, until the new one is formed. By dressing the toe with a thin, light and dry cloth, so as not to exclude the air from the wound, the formation of the latter will be facilitated.

Case IV.—*Cartarrhal Conjunctivitis.* We have for treatment this morning four patients with what is called Catarrhal Conjunctivitis or more accurately describing the conditions present, granular lids and vascular cornea. The conjunctiva or mucous covering of the globe and lining of the lids contains in its anatomical structure papillæ, which, when affected by inflammation enlarge and form the large, fine points which you observe as I invert the upper lid of the first patient. Both upper and lower lids are highly inflamed, and the rough surface is very apparent. On the inner portion of the upper lids of this patient is a deposit of lymph making the so-called trachoma. The cornea in both eyes is very hazy and vascular, conditions which are caused by the roughness of the lids. A little below the centre of the cornea in one eye you observe a dark point. This is the site of an ulcer which has extended through the cornea; the iris has fallen against its walls, being carried forward by the escape of the aqueous humor and has there attached itself; the ulceration has healed, and fortunately vision has not been destroyed. You thus see that ulceration and even perforation of the cornea may follow from the effects of this disease, and thus vision may be greatly impaired or even lost.

In the second patient, the disease is somewhat modified. The upper half of the cornea is opague and vascular while the lower half is clear. Thus showing that the disease is confined to the upper lid mainly. In the third patient we find the upper lid also in a red and roughened condition and the cornea but slightly affected. In the fourth patient you will notice only a few enlarged papillæ or granulations while a large portion of the lid appear white. This is a sign of convalescence. The treatment of all these cases is the same. The first object is to prevent extension of the disease in all cases where there is any manifest contagious tendencies. Great cleanliness, and generally good diet is required. Nothing is more common than broth for food, with blisters, leeches and other counter-irritation, and nothing is so sure to end in failure. Various collyria have been depended upon, most of them of little use. The crayon of nit. silver, or a saturated solution applied to the rough surface might be efficient, but there are serious objections to its continued use, which I will hereafter explain. The safest and most efficient treatment ever yet proposed, is to apply he crayon of sul. copper to the surfaces of both upper and lower lids, daily. If you will adopt this and adhere to it, you will be *always* successful. If perseveringly and carefully applied, it is certain and uniformly satisfactory.

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Miscellaneous.

Varieties of the Pulse.

By **Charles W. Chancellor, M. D.**, Professor of Anatomy in the Washington University (Medical School), Baltimore, Md.

The phenomenon called the pulse is inseparable from life in the warm-blooded animals, except in the hybernating during their state of torpor; it exists also in the more perfect of the cold-blooded animals.

In viewing man we observe, independently of any particular anatomical knowledge, a symmetry of form, a gracefulness of motion, and an expression of life and intelligence admirably calculated to attract our attention; and if we were not liable to various accidents and diseases, which cause us to suffer and to die, there would be little inducement to enter further into the study of the human organism. What was probably undertaken, therefore, from feelings of necessity, growing out of the frailties of our structure, has now become so interesting that no organ or function can be examined without exciting admiration, and a desire to know more of the phenomena of animal life.

The researches of two thousand years have served only to excite our curiosity; and though much has been done, we are probably but at the threshold of physiology. We must not. however, forget that through a long course of dark ages nothing was added to physiology, and as nothing like science could be introduced into this department of philosophy until the discovery of the circulation of the blood, it is evident that this science but dawned with the discovery of Harvey at the beginning of the seventeenth century.

We are now perfectly familiar with what is properly termed the circulation—we know that it is only necessary for the venous blood to enter the right auricle of the heart to commence its suit of actions, which shall succeed each other in the healthy state with unerring regularity. The auricle contracting, throws the blood into the corresponding ventricle; it is then forced into the lungs through the pulmonary arteries, returned by the veins to the left auricle and ventricle into the aorta, and thence distributed to the capillaries.

Although it is obvious that there must be a regular correspondence of action between the auricles and ventricles, and although there is an association and concentration of actions in a state of health, still we may readily perceive that in addition to the disturbance which may arise in the heart by a want of proportion between the sensorial and the stimulus of the blood, there may be diseased action from want of proportion as to time, or force, or sensibility, in the moving apparatus of the different cavities. The power of the ventricles may not exactly correspond with that of the auricles, or that of one ventricle with the other ventricle, etc.

After all, so far as we can discover variations in the pulse, they depend in a great measure upon the more or less regularity or perfection with which the left ventricle performs its office.

There has been considerable diversity of opinion among medical writers respecting the pulse, both as to the best arrangement obtained by an examination of the subject. Some have held the opinion that we cannot discriminate with sufficient certainty beween one pulse and another, except as to frequency and force. Of this opinion the celebrated John Hunter, in his Treatise on the Blood, page 218, makes this remark: That "frequence of pulsation in a given time is measurable by instruments; smartness or quickness in the stroke, with a pause, is measurable by the touch; but the nicer peculiarities in the pulse are only sensations in the mind." He continues: "I have been certain of the pulse having a disagreeable jar in it when others did not receive it; when they were only sensible of its frequency and strength; and it is perhaps this jar that is the specific distinction between constitutional disease or irritation and health. Frequency of pulsation may often arise from stimulus, but the stroke will then be soft, yet softness is not to be depended on as a mark of health. It is often a sign of dissolution, but then there must be other attending symptoms."

What Mr. Hunter calls a "jar," Dr. Rush terms a "jerk." No writer has obtained more universal credit for veracity than Dr. Rush, and he says, speaking of the peculiarity of the pulse in the fever of 1793, that he thought he could have distinguished the disease by it without seeing the patient. "This pulse," he says, "attended cases of remittents produced that year by the same causes as yellow fever, and often occurred in persons who were able to go about."

All the well-marked varieties of the pulse may be included in the full, tense, slow, frequent, quick, soft, irregular, and feeble.

The Full Pulse is common in phlegmonous inflammations, in inflammations of the pleura, and in acute exanthemata. In these cases, particularly in the athletic, it is also tense, and generally somewhat frequent. In some cases of extreme debility from exhaustion by hæmorrhage, or disease, the pulse is full, mostly frequent, and very yielding and soft. This condition has been termed the compressible pulse.

The Tense Pulse, or the hard pulse, we have seen sometimes attend the full pulse, but tension of the arterial coats indicates more danger when the vessel is small and very tense, not because there is a reduced quantity of blood, but because we know by actual observation that this state of the pulse indicates severe disease of some important vital organ. A tense pulse can, under no circumstances, be indicative of anything salutara. It has been remarked by Dr. Rush and others that this pulse is almost always present at the onset of malignant fevers, and this same author tells us that "in some cases the tense and full pulse were present in the last hours of life." A degree of tension of the artery at the wrist, though considerably above the healthy standard, does not particularly indicate danger; but great tension with remarkable slowness, or great tension with extreme frequency, are almost always ominous of danger.

The Slow Pulse, when remarkable in acute disease, is perhaps always indicative of danger. It should be remembered that instances of slow pulse occur as idiosyncrasies of habit, or it may be that there are intermediate strokes too feeble to be perceived. In an illness where the pulse suddenly becomes slow from being feverishly quick, with an aggravation of other symptoms, it is an indication of the disease being translated to the brain; or if the pulse of a child be fifteen or twenty below the lowest limit of the natural standard, it may be regarded as a certain indication of the brain being affected. In injuries about the head, too, the slow pulse indicates cerebral complication. A case came under my observation a short time since illustrative of this fact. A lad, twelve years old, recived in a fall a slight blow upon the left parietal boss, from which he experienced no particular inconvenience at the time, but in a few minutes he complained of headache and confused vision. There was no mark of violence upon the scalp, nor of injury to the cranium, but the boy's pulse was only *forty* beats to the minute. This, in itself, was sufficient to awaken a suspicion that "shock" had been communicated to the nervous system, and a course of treatment to meet the indications was adopted. In ten or fifteen minutes thereafter vomiting ensued, the surface became pale and cold, the pupils were widely dilated, and the sufferer passed into a condition of semi-consciousness, with all the objective and subjective indications of concussion. Now, in this instance, the slow pulse was the first, and for some time the only diagnostic sign of cerebral complication, and was in itself sufficient to point out the nature of the injury.

The Frequent Pulse does not particularly indicate danger, unless above 120. When upwards, in acute fevers, the patient will generally be delirious, except in hectic. In rheumatism the pulse will frequently beat upwards of 120 without indicating danger, but a pulse upwards of 120 is said to be almost always a fatal omen in asthma. Authors speak of seeing patients recover whose pulse had been 180. This pre-supposes the possibility of counting 180 beats per minute, which can seldom be done; indeed where there is extreme frequency we cannot easily count above 140.

The Quick Pulse.—The heart is so easily thrown into irregular action in diseases that nothing is more reasonable than the supposition that it may perform its systolic action in less time than natural, and it is doubtful whether we obtain any advantage from endeavoring to estimate the quickness of the pulse. The difference between the frequent and quick pulse is readily demonstrated, notwithstanding many use these terms as synonymous; the former takes cognizance of the number of beats in a given time, say one minute, the other has relation to the time of contraction to the left ventricle of the heart and the muscular tunic of the artery. Dr. Rush expressly tells us that in the epidemic of 1793 the pulse was both frequent and quick in many instances; and this peculiarity has also been recognized by Good and other authors.

The Soft Pulse.—This state of the pulse is, perhaps, never indicative of danger, except in cases of extreme debility; and here the danger is manifested as much by the frequency as by its softness, or rather weakness; when it attends dissolution it is usually under those circumstances. Generally this pulse is the harbinger of returning health; nothing is more acceptable to the experienced physician or surgeon after a state of morbid excitement, from whatever cause, than a soft, equable pulse. In short, it is almost uniformly the pulse of convalescents, but here it is mostly equable.

There is, however, a soft pulse, with very considerable dilatation of the arteries, which sometimes attends a great and sudden degree of exhaustion. This peculiarity is seen where much blood has been lost by hemorrhage. The blood, in these cases, is greatly weakened in its texture; it contains very little plasma or red corpuscles, being principally serum, which will scarcely stain a linen rag.

The Irregular Pulse is often seen in malignant fevers and in violent injuries of the viscera, especially the liver; the heart and arteries hobble, as it were, through their functions. This pulse also attends rheumatic diseases, without, however, portending danger; but in malignant fevers or injuries of the viscera it may be regarded as an unfavorable, if not dangerous symptom.

The Feeble Pulse is often associated with other states of the pulse. In protracted diseases generally a feeble stroke of the artery will take place. In typhus fever it is a distinguishing symptom, which occurs very early in the disease, and is persistent, whereas in hectic fever it changes with the paroxysms, the pulse being at one time of the day tense, and at another extremely feeble, and it is not till a protracted period that the feebleness predominates.

There are other states of the pulse noticed by different writers, which, however, are without any well-grounded meaning or utility. Sir A. Cooper speaks of an "oppressive state of the pulse"; Dr. Darwin of an "empty pulse"; Dr. Rush of a "shattered or quill pulse." Others have spoken of a "laboring pulse," a "breathing pulse," a "thready pulse," but all these may properly be referred to the foregoing heads.

Lastly, there are instances in which the radial artery in one arm presents abnormities which might lead to error in diagnosis; it will, therefore, be well, at least with strangers, to examine both arms, as other peculiarities may be met with of which patients may be insensible.

Celsus, who was ignorant of the circulation of the blood, characterized the pulse as a *res fallassisima*; but since the brilliant discovery of Harvey its value as a diagnostic means has been universally recognized, and as we become more conversant with the laws or principles by which organs so curious are enabled to preserve their own existence and perform certain functions individually and in unison, the pulse will become more and more a subject of interest and investigation.—*Richmond and Louisville Medical Journal.*

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The Treatment of Syphilis.

Syphilis, says M. Bazin in a work recently issued, containing his clinical experience at the Hospital Saint Louis, Paris, is a disease which takes its place rightly by the side of scrofula, arthritism, and herpetism. Now, syphilis has but one specific remedy—mercury, and as we do not meet with mercury in any mineral water, it is necessary to have recourse to the "Pharmacopœia." An hospital surgeon, M. Depres, of Paris, has expressed himself as very hostile to this drug, and has almost taken up the fulminations of Broussais to stigmatise it. According to M. Depres, mercury is useless, and dangerous—useless, because Nature cures syphilis very well without Art intervening; dangerous, because it produces a crowd of disasterous effects which every one knows. Unfortunately, for

M. Depres, says Bazin, this doctrine is not tenable from any point of view. With regard to the action of Nature, clinical observation shows that it is only the benignant affections in syphilis which are cured without the assistance of Art. It is not the less certain, he says, that mercury acts not only on these affections, but also on the generality of syphilitic manifestations—that it has upon these an undeniably specific action. In reply to the argument as to the multiple accidents produced by mercury, Bazin admits these, but says that a good practitioner ought to know how to prevent and to correct these, whether by associating with mercury either chlorate of potash or iodide or bromide of potassium, or by making appeal to certain mineral springs, hydropathy, or other agents which are part of the specific treatment. He does not use the pills of Sedillot, because they salivate too rapidly. He prefers the pills of protoiodide of mercury, and prescribes Van Swieten's liquor in his hospital, which contains the thousandth part of its weight of corrosive sublimate. For ulcerated syphilides in the third period Bazin recommends a mixture of biniodide of mercury and iodide of potassium, and in children the same mixture. He uses mercury in all periods of syphilis, in the indurated chancre and in tertiary symptoms. In the second period Bazin does not admit in any way the distinction made by Diday between the benignant accidents which that doctor leaves without mercury and the malignant accidents which require it. Bazin says that slight secondary symptoms give no prognosis as to the gravity of tertiaries. When tertiary symptoms have arrived, some doctors give iodide of potassium and abandon mercury. This, according to Bazin, is a fault; they should be associated, not separated. In the fourth period of visceral lesions mercury is still indispensable, unless the patient has been salivated by it, in which case iodide and bromide of potassium are indicated, or sulphur. M. Bazin says iodide of potassium is not sufficiently powerful against the neoplasms of syphilis, and that the physician will not be certain to cure a patient attacked with ulcerated syphilides with iodide alone if the patient has not taken a mercurial course. On the other hand, iodide of potassium succeeds marvelously well when mercury has been given to the patient, even long before the appearance of these latter accidents. The formula he employs is 200 grammes of water to 6 of iodide of potassium. A tablespoonful for a dose, which gives about eight grains for a dose. But these doses should be quickly raised, and in two or three weeks amount to sixty or seventy-five grains a day, without going further.

Dr. Kraus, in the *Alg. Wien. Med. Zeit.* of 27th June, says that the French and English still use blue pill in syphilitic bubo, leeches, with purges, and compression by means of compressors. Ricord advised in bubos accompanying chancre, blister and calomel dressings; but Dr. Kraus considers such practice as *barbarous.* The first requisite in such cases is absolute rest, as well as attention to the ulcer which caused the bubo, which should neither be covered with strong astringents or strongly cauterised; cold bandages should be placed on the swelling and tincture of iodine painted on it; the skin over the swelling is to be rubbed thrice a day with a liniment composed of equal parts of tincture of iodine and galls and cold dressings after. In this way doubtless many favorable results are obtained. Some say that the good result is entirely attributable to rest and the application of cold bandages. If the resorption of the swelling cannot be effected by this treatment, and true fluctuation is felt at any point, the abscess should be punctured and softly emptied by pressing on from the periphery. The swelling is then dressed with cold dressing and painted with tincture of iodine or a plate of lead with a weight above it of half a pound laid on the parts. In order to prevent the dangerous entry of air into the abscess Zeissl puts many of his patients into sitz-baths, and punctures the abscess under water, then covers the parts with plaster of Paris, which prevents the entrance of air and exerts pressure on the parts. Should the opening close up after being punctured, it is opened again with the sound, or punctured afresh. In this way, in many cases, we succeed even in extending abscess, and when the skin is extensively reddened to a perfect cure. The advantages of this method over the opening by incision or cautery are indescribable, and we need only look at the ugly great scars which remain after these methods, and give, too, a predisposition to hernia, to see what an improvement this practice is. The chief advantage of puncture resides in the notable shortening of the period of treatment, as the cure takes place in two-thirds of the time it took after cautery. We must notice, that even an extended abscess and reddened skin are not always contra-indications against this method. We have only to make several punctures (in order to prevent the ulceration of the thinned integument) around the swelling and on the healthy integument. The sooner such punctures are made, the more likely we are to have fortunate results; but even in cases of long chronic bubos, full of pus, we should always try what puncture will accomplish, since when the puncture does not succeed, the incision can always be resorted to. The gangrene of the edges of the puncture, which often taken place when the puncture is made through very thin skin, is truly a very disagreeable event; but, even then, cure takes place much quicker and less painfully than it does after crucial incisions; besides which the other methods are often followed by severe results.—*The Doctor.*

Cundurango—How to Treat Humbugs.

Probably there is no class of men, unless it be the clergy, who have the credit of being more dogmatic and intolerant than physicians, and yet there is probably no class who could, on demand, show a better reason for the faith that is in them. This is doubtless due to the fact that the medical man has to deal with the practical application of a science which it is impossible for him to explain to the uninitiated, within the ordinary limits of the intercourse existing between a physician and patient or patient's family. It is necessary, therefore, that he should possess their confidence, and that they should be content to confide to him the treatment of the patient, without expecting to play the doctor themselves, or to have explained to them in a moment what it takes ordinary intellects years to master. We have no patience with those old women in the profession who consult with every old woman out of the profession and spend half their lives in a vain effort to preach and expound bad therapeutics and worse pathology to the understanding of their befogged but flattered patrons.

There is, however, a field where it appears to us that the medical profession might, with propriety and advantage, give the public more information and satisfaction than it does, thereby doing much to relieve itself from the charge of blind intolerance, and at the same time rendering the community a valuable service.

Let physicians first thoroughly inform themselves, if need be, and then truly and quietly inform the people, as they have occasion, why certain patent medicines are worthless or dangerous, or entirely inapplicable to nine-tenths of the diseases they claim to cure; how certain pretended oculists, aurists, electricians, etc., never had an opportunity to study the specialties they claim to practice; what are the errors and absurdities of certain so called schools of medicine, how impossible it is for their followers to practice according to the principles they profess to believe, and how, if they do not do this, they are not honest men. These are some of the foes that we have constantly in the field, while individual skirmishers and blockade runners of every description are ever appearing on the horizon, worthy perchance of a random shot if not of a more protracted chase.

What is the custom of physicians to-day when questioned by their patients or friends on any of these subjects? Is it not most brusquely, contemptuously, and with scant courtesy even toward the questioner, to burst forth with "fraud!" "quack!" "humbug!" giving no reason for the sentence thus summarily passed, and even growing indignant if asked for a reason? The imposture seems to them so plain and aggravated that they can scarcely have patience with any one for questioning it. And yet no doubt this very method of treating the subject has led many of our friends into the belief that there is something in these frauds, that they are dangerous competitors of the doctor, and that therefore he waxes so indignant when they are mentioned. If the physician had calmly explained the matter to them, and given the data for his opinion, he might, nine times out of ten, have convinced them of the inefficacy of a preparation or the incapacity of a man in which or in whom they have now invested not only faith but money.

In this connection we take pleasure in calling the attention of our readers to a valuable article in the *Chicago Medical Examiner*, for September, 1871, on "Homœopathy as it was and is," Dr. G

W. Earle. This paper gives us chapter and verse for a good many of the absurdities of Hahnemannism, sufficient, one would suppose, to convince any candid mind that the system has nothing to entitle it to the confidence of reasonable people.

Physicians throughout the country are to-day being asked by the more intelligent reading portion of the community, "What of Cundurango? Is it a cure for cancer?" Merely and curtly to answer, "no, it's a humbug," will have the effect of making many a man doubt the soundness of our judgment or the extent of our information on the subject. Let us then, from the start, meet this new fraud, for such we consider it to be, with facts and not merely with sneers.

Specimens of this drug were distributed in April last by the Department of State to the Surgeon General of the Army, the Chief Medical Officer of the Navy, the head of the Department of Agriculture, and some others, for the purpose of having its merits tested. It has been subjected to a chemical analysis by Prof. Antisell, of Washington, D.C., and Dr. E. R. Squibb, of Brooklyn, N.Y., both of them gentlemen of national reputation. They find it to contain no new active principle of any kind, rank it, therapeutically, among the aromatic bitters, and expect nothing more from it, as the result of analysis, than from any other variety of the same class.

In practice, the drug has been tried by medical officers of the army and navy, residing in Washington, New York, and elsewhere, and having the best opportunity for selecting cases of cancer seated in various organs and at different stages of progress. In every case *Cundurango has entirely failed.* We have seen the detailed report of four of these cases, two of which died, and the other two seemed in no degree benefited by the treatment. A number of reputable physicians, not in government service, who were furnished with specimens of the bark, tried it with no better results.

Now comes Dr. Bliss, of Washington, onto the stage, and, *presto!* everything changes! He tries it in some six cases. In every one it works like a charm, all are immensely relieved, several are cured. The doctor hastens to herald to the world the glorious tidings that henceforth cancer shall be no more, for great is Cundurango and Bliss is its prophet!

We ask any reasonable person, is it likely that all these other observers were wrong and Dr. Bliss alone right; is it probable that they all reported falsely, and he only told the truth? What object could they have in making out a case against Cundurango? for, mind you, their experiments and reports were made before his, so that even jealousy of him could not have come in as a cause. Is there a reputable physician, nay, is there a decent man living who would not hail with joy the discovery of a cure for so dread a scourge of humanity as cancer? And yet some secular papers, amongst them even the *N. Y. Tribune*, echo Dr. Bliss' doleful plaint that the regular profession are "persecuting" him for his "discovery" of the virtues of this bark. Persecuting him because they report that they can find no efficiency in the drug, and because they have discovered that *four of Dr. Bliss' six cancer patients*, treated with Cundurango, *have died! !*

Was Dr. Bliss under any temptation to overestimate the value of the drug, to be misled himself and thus to mislead others? Judge for yourselves. Early in the history of this agitation, he dispatched his partner (whose name we believe is Keen) to South America to buy bark. While he was gone, Dr. Bliss vigorously "puffed" the article by circulars, newspaper articles, etc. The cargo, which is to make his fortune, having arrived, the doctor has abandoned his practice in Washington, and is to set up a "Laboratory" in New York. The *N. Y. Medical Record*, of September 15th, says: "A physician of this city who recently applied for four ounces [of Cundurango] was furnished with it, the bill being headed Bliss, Keen & Co., and the amount charged $50 00!!"

Let those who ask us be informed of these facts, and when "Bliss' Cancer Cure," put up in fancy bottles and covered with certificates of success, is "sold by all *respectable* druggists," some at least of the more intelligent in the community will know how to estimate its value.—*Kansas Med. Journal.*

Cundurango.—We have but little patience in chronicling of the progress of cundurango. We have already indicated our entire disbelief in all its claims. There is nothing upon which to build a show of faith. In the last number of the National Medical Journal, at Washington, we see that Dr. Bliss is expelled from the medical association, District of Columbia. We scarcely see how this could be otherwise. The whole thing is a fraud, sham, and swindle, and we deeply regret that any official influence should have been secured in its favor. The last quotation for cunderango is $100 per pound, only sold by Bliss, Keene & Co, New York.—*Cincinnati Lancet and Observer.*

The Boston Medical and Surgical Journal, of August 17th, has an article upon "Cundurango," by which it appears that stock in this new curative agent is already below par, and we are admonished that cancers will probably continue to afflict mankind for an indefinite period of time yet to come. Quacks will still flourish, and imposters still pocket enormous fees for curing simple tumors and for promising to cure malignant ones, and credulous people will still continue to be fleeced as of yore.—*Mo. Dental Journal.*

Cundurango has been consigned to an untimely grave. The quacks have adopted it. Dr. Bliss had best give it a long and last farewell, unless he has gone over to the ranks of charlatanism; for to praise it is charlatanism.—*Richmond Medical Journal.*

We published in the January number of the American Practitioner, a short account of this, the latest remedy, so-called, for cancer. Since then we have received several letters making inquiries concerning it. To one and all, we have to answer, that so far as we have been able to learn, cundurango is a complete failure.—*American Practitioner.*

Cundurango Wood is all the rage just now. We have foreborne to say anything about it, believing it was an intentional sensation, created for a special object. Dr. Bliss, of Washington, is at the top of the heap. His partner went to South America for a quantity of the wood. Meanwhile Dr. Bliss gets expectation on tip-toe by passing a gratuitous notice round the press that he will have plenty of it for sale at a certain date. Then like a very quack, he sends Mrs. Matthews, Schuyler Colfax, and lesser dignitaries, galloping round through the journals, proclaiming the virtues of the drug, to say nothing of the skill of Dr. Bliss. And several of our homœpathic journals bite the gudgeon with most shocking avidity. This is doubtless all right, but rumor has it hereabouts, not far from Dr. Bliss' early home, that somebody expects to scoop *sixty thousand dollars* on this enterprise. We shall see what we shall see.—*Ohio Medical and Surgical Reporter.*

Correspondence.

Clinics in Bellevue.

NEW YORK, October 17, 1871.

To the Editor of the Buffalo Medical and Surgical Journal.

MY DEAR DOCTOR:—Thinking you might like to know a little of what is taking place in the way of medical teaching here, I will give you a concise idea of some of the cases presented at the clinics of the Professors in the Bellevue Medical College. I will first state, however, that Prof. White, of the Buffalo College, attended one of the clinics of Dr. Flint a few days ago, and was received with most hearty applause by those who enjoyed the advantages of his instruction here last winter.

In a Surgical point of view, this College affords some advantages in having a large number of teachers; and during a whole course of lectures, no doubt cases will be observed illustrating nearly all diseases with many of the operations. But there are some disadvantages to the student which do not obtain in colleges less largely attended. It is impossible for all to see the varied steps of an operation, and students are not permitted to pass through the wards of the hospitals, so that in reality a much less number of cases is seen, with their variations and complications, than in some of our inland institutions.

Dr. Hamilton presented, some two or three weeks ago, a case of actual scirrhus of the breast, which he treated by Electrolysis. The patient had suffered from much pain, and there was enlargement of some of the axillary glands. At the present time the tumor is reduced in size, and softer, the axillary glands are diminishing in size and hardness, and the patient has not suffered from a particle of pain since the operation. The doctors inference from this and a few other cases is, that while electricity by means of needles will not eliminate the essential nature of cancer or affect its tendency to become localized, it has the power of dispelling the tumor consequent upon its influence, and if no other result be obtained than the relief of pain, and the consequent nutrition of the body it is a sufficient reason for employing it. He did not say he would substitute it for the knife in cases falling under the rules for operative procedure.

Dr. Stephen Smith had a case of dislocation of the shoulder backward, a rare form of injury, caused by a direct blow upon the front of the upper end of the humerus. The injury had been received several days previous, and some difficulty attended the reduction. Manipulation failed to reduce the bone, owing, the doctor thought, to rupture of the subscapularis tendon, thereby losing the benefit of its assistance. The arm was then drawn somewhat obliquely across the patients chest, and with strong traction made by an assistant, the doctor at the same time pushing against the head of the bone with some manipulations, the reduction was finally accomplished. This was an interesting case to me, as it was the second case I ever saw, the first being a recent case by Dr. Hamilton in the Buffalo Hospital of the Sisters of Charity I believe in 1859. Reduction in that case was not attended with difficulty.

Dr. Gouley, (not of the Bellevue College) at the Bellevue Hospital, ligated the primitive (?) illiac on the 12th inst., for "true diffused" aneurism of the external illiac, assisted by Drs. Mott, Markoe, and Crane. Dr. Van Buren and others were also present.

He performed Crampton's operation, by cutting from near the termination of the eleventh rib to the neighborhood of the anterior superior spinous process of the illium to the peritoneum, passing under which until he found the artery and secured it. The doctor dared not pass far downward for fear of injury to the tumor which was large, and he was in doubt as to which artery he had reached viz.: the external or primitive illiac. Dr. Mott was fully of the opinion that it was the primitive from its Surgical relations, and a recent aneurismal tumor would not be capable of pushing the artery from its bed. The patient at the present time is doing well.

Dr. Sayer has showed us the practical application of his apparatus for extending the limb in diseased joints, still enabling the patient to go about. His vertebrated probe seems indispensible in the diagnosis of certain cases of diseased bone, the seat of which can only be reached by crooked sinuses. His views attracted a good deal of attention in Europe while there during the past summer, and were received with enthusiasm.

In the clinics for diseases of women, Dr. Isaac E. Taylor has presented a case of a colored girl 21 years old, which he thinks is a clear case of spontaneous inversion. The length of the cavity has been found by measurement to have been at one time six inches with lengthening and enlargement of the cervix. It was attended by procidentia dilating and pressing through the hymen, which is intact, and vulva. It has spontaneously undergone a nearly complete return to its normal length, though the cervix is still only just within the hymen, proving, the doctor thinks, that the virgin uterus may undergo spontaneous inversion and repair. It is probable, however, that most teachers of gynæcology would not admit that this case was more than one of the lining membrane from inertia with descent of the whole organ. Dr. Taylor has also presented some interesting cases of lupus of the vulva.

Dr. Flint presents his cases with his usual clearness, clearing up the diagnosis of doubtful cases to the satisfaction of his listeners.

There is much more that I could write about in a clinical way but time and space forbid; nor have I thought best to comment on the procedures, etc., which I have related.

Very respectfully,

C. H. Richmond.

Editorial.

Commencement of Lecture Terms in Medical Colleges, &c.

It may be well at the present time, when the Lecture term in our own, and in most of the Medical Colleges of the country, is about to commence, to draw attention to the general fact, and speak a word of the advantages thus offered Medical students to obtain knowledge of the science and art of medicine. It is not very uncommon to hear our colleges spoken of, as close corporations, organized for secondary and unworthy objects, superficial in their teaching, and requiring but little attainment for graduation. Such statements have not been made, perhaps, without some show of truth in rare instances, where new colleges were struggling for a beginning; but so far as obtains in the vast majority of Medical Colleges in our country, nothing can be farther from the truth. It will no doubt be conceded by all, that in our American Colleges have been educated our American physicians, and cannot these institutions point to the physicians of the country with pride, and say, "*ye are our witnesses.*" If they have borne such fruit, is there just ground to believe them inferior in their modes of instruction, or inadequate in the scope and extent of their teachings. Prof. Gross, writing upon the comparative standing and attainments of American physicians, says, "If we compare the results of the practice and operations of American with those of European Surgeons, it will be found that they are fully up to the general average, if, indeed, not far in advance. This statement is true alike of our civil and military experience. Where are there better, more enlightened, more able, skillful, or scientific staffs than are to be daily seen in the wards of the hospitals of our cities? Comparisons are odious. In my visits last summer to the hospitals of France, Italy, Austria, Prussia, Holland, Belgium, England, Scotland and Ireland, I saw nothing to induce the belief that the Surgeons of these institutions, many of them veterans, whose names are as familiar to the American Medical profession as household words, are, in any respect superior to the same class of men among us, either in general or professional intelligence, in the art of diagnosis, in therapentic refinement, or in manual dexterity."

When Chassainac affirms, "America at this moment wields the Surgical sceptre of the world," it can scarcely be made to mean that American Surgeons are destitute of education, skill and scientific attainments. It is expected of our Medical Colleges that they educate young men as far as possible in medicine, surgery and the collateral sciences—Anatomy, Physiology, Chemistry, etc., etc. How well and faithfully this has been, and is being done, is sufficiently obvious. Whatever might be said of the requirements of foreign institutions in comparison with our own—of the length of time and preliminary culture demanded, whatever is claimed for their graduates in being more learned—knowing more Greek and Latin, Mathematics, Astronomy, and other branches of university education, no one will suppose them more thoroughly trained in a full knowledge of Medicine, Surgery, and the collateral sciences. American physicians educated and graduated from American institutions have superiority in practical knowledge, which has been everywhere seen, and frequently acknowledged, and is just source of honest pride. The reason of this superiority in practical wisdom we do not propose at present to explain, they are sufficiently obvious. It is not claimed that our Medical Colleges have reached the highest point of possible excellence, or that the standard of preliminary and professional attainment is as high as is desirable, far from it. It is only claimed that the American Medical student may here obtain as perfect knowledge of medicine and the collateral sciences as can be obtained in the same time in any college or country. We have defects in our system of education, and we shall be with the very first in advocating any changes for improvement. Meanwhile we most heartily congratulate the medical students of to-day upon the exalted and ample opportunities which they may enjoy. No country or profession ever made more rapid strides in improvement than has been witnessed in our country and by the American medical profession, and we have just ground of pride in our achievements. If it is an honor to be an American citizen, by how much greater honor to be an American physician.

Cundurango at Less Price.

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NESTLE'S LACTEOUS FARINA, or "Mother's Milk," has been used by some of our leading physicians for the last two years, who speak favorably of it as a substitute for Mother's Milk.

Prize Essay on "Diseases of Children."

The President of the Medical Society of the County of New York, Dr. Abraham Jacobi, has placed in the hands of its Treasurer four hundred dollars ($400), to be awarded for the best essay on "A History of the Diseases of Infancy and Childhood in the United States, and of their Pathology and Therapeutics." Competitors will send their essays in English, with motto attached, and the name and address of the writer, with the same motto, in a sealed envelope, to the present Secretary of the Society, Dr. Alfred E. M. Purdy, 123 East Thirty-Eighth Street, New York, on or before January 1st, 1873. The Committee are authorized by the Society to withhold the prize if the essays submitted should not merit it.

AUSTIN FLINT, M.D.,
ERNEST KRACKOWIZER, M.D., } Committee.
EDWARD S. DUDSTER, M.D.,

Introductory Lecture in the Buffalo Medical College.

Prof. H. N. Eastman, will give the opening Lecture of the course in the College Amphitheatre, Wednesday evening, November 1st, at 7 1-2 o'clock. The lecture will be of interest to the intelligent public, and all are cordially invited to attend.

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Skin Diseases

The Students' Classifisation of Skin Diseases. By J. W. SOUTHWORTH, M. D.

We have received from the author the following classification of Skin diseases, which we publish for the benefit of students and others interested.

CLASS ONE.

Inflammatodermæ which are Non-contagious, and chiefly Diathetical.

Erythematous Group.—Erythema, (Simplex), Urticaria, (Simplex), Roseola, Erysipelas, (Simplex), Pellagra, Acrodynia.

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Essay on Growths in the Larynx. By Morell Mackenzie, M.D., London, M.R.C.P. Lindsay & Blakeston, Philadelphia, 1871.

This essay contains report and analysis of one hundred cases treated by the author, and a tabular statement of all published cases treated by other practitioners since the invention of the Laryngoscope. Numerous cuts in chromolithography and wood engravings illuminate the book.

The medical profession will appreciate this essay all the more that it is upon a subject which but few practitioners pretend to understand; nearly all are in the position of learners. The Laryngoscope has but recently been introduced into use in the diagnosis of Laryngeal affections, and the illustrations which are here given will serve most admirably to give an idea of what it is expected to show, and what by its aid we may be able to accomplish. Physicians who desire practical knowledge on the subject of Laryngeal outgrowths, then symptoms, appearances, modes of developement, diagnosis and treatment, together with many other allied subjects, will find it open before them in this book most beautifully and plainly.

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at the angle of the eye, and is not accompanied by any constitutional trouble. A specific peculiarity is that you get an Erysipelatous inflammation of the mucous membrane of the eye. The eye lids become inflamed and swollen, and in a short time the eyesight is entirely shut off by desquamative conjunctivitis, the membrane rolling up into scrolls.

I have seen four cases of this character, and I have seen four fatal results. The manner of death would indicate that the brain is involved. Perhaps the disease extends itself through the opt.c structures to the base of the brain. The cases which I saw were in persons between twenty and forty years of age.

In the first case I had no idea of danger. General hygienic measures were adopted. In a short time the patient died. The second patient died the second day after I was called in consultation. The death of the third I attributed moie to complication with other diseases than to a severe attack of Erysipelas. The fourth called at my office, he was a captain on the lakes, had no bad habits, was not addicted to drink, was not syphilitic. I noticed the characteristic inflammation of the eye, and told him to go home and to bed. His pulse never varied from about 70 per minute. There was no vomiting, no diarrhœa; in about ten days his eyes were well, and I put him down as one successful case. One Saturday I told him I should not call to see him the next day as he was so much improved, but being in the vicinity I ran in to see him. His wife met me, saying that her husband had been up for a short time, but had gone back to bed again. I went into his bedroom and found him dying. I think effusion had taken place about base of the brain.

Erysipelas is one of those diseases called zymotic, it is a blood disease. It sometimes, as an epidemic, gives rise to that disease called black tongue. It prevails chiefly in that season of the year which is cold and damp. Not only does it extend by atmospheric influence, but may be carried by one person to another. It is never safe to make a surgical operation after visiting a patient who has Erysipelas. When Erysipelas is prevalent, Scarlet Fever almost always is, and *vice versa.* It may also give rise to Puerperal Fever. It is dangerous for a woman about to be confined when Erysipelas is prevalent. A medical man should always take great care in attending cases of parturition and Erysipelas, lest by some means the parturient female suffer from puerperal fever, the result of contagion.

The treatment of Erysipelas should be both local and general. Many practitioners think topical applications of little value, and some regard them as even hurtful. Others, on the contrary, depend almost exclusively upon them. I suspect that in this, as in most matters of controversy, "the truth lies between." Topical measures should have for their object, the arrest of the progress of the disorder and the alleviation of the pain and itching. The tincture of the chloride of iron undiluted, applied with a hair pencil, has almost superceded the tincture of Iodine. Velpeau's lotion is a strong solution of the sulphate of iron in water, and is admirably adapted to large surfaces; housekeepers, however, will complain of its effect upon the sheets and pillow cases. Twenty years ago the "house lotion" at Bellevue was the following :

℞ Plumbi Acetatis, - - - - ʒj.
Aquæ Puræ, - - - - - ℥xxxij.
Tr. Opii, - - - - - ℥ij.

and it is still the most popular application there.

Whisky, pure or diluted, has its advocates, simple warm water is also recommended, and the dry powder of starch or flour is much used. Attempts are sometimes made to establish a line of demarkation with vesicants, or with the solid nitrate of silver. The popular cranberry poultice owes its efficacy to the acid juice of the fruit.

The general treatment of Erysipelas should, from the nature of the disorder, be sustaining and expectant. Often little or no medication is required, and nearly as often therapeutic agents are demanded, and there is room for much judgment and skill in their selection and adaptation to individual cases. Purgation as remedial is not to be advised, except where coma occurs, and then must be employed cautiously. Diuretics and dilutents, in the shape of large draughts of pure water, or with a slight alkaline admixture, are not objectionable, and when the urine is scanty, bloody, or albuminous, should always be used. Restlessness and wakefulness equire anodynes. Dovers Powder with Quinine often answer well, ut failed in the patient you have seen to-day. Last night he took twenty grains of Chloral hydrate, slept ten hours, and awoke refreshed, and with his mind clear. I imagine it will often act just in this happy way—but I have never prescribed it before in this affection. There are very few cases of Erysipelas that do not get on well with Quinine, or with Quinine and the mineral acids. The tincture of the chloride of Iron is, if possible, more in demand for internal than external use. It was first advocated on the hypothesis, that the disease was associated with a great deficiency of the red corpuscles of the blood, and that iron in solution was to be used to correct this condition. Whether the hypothesis is just or not, the remedy proposed met with a very favorable reception, and has long been employed, and appears to be in as great favor as ever. In Erysipelas and in all kindred asthenic disorders, I think you will find the following combination useful. I have used it so often, and so successfully, that I am very partial to it.

℞	Potass Chlor. Pul.	ʒss.
	Tr. Ferri. Chlor.	℥j.
	Syr. Simplicis,	℥v.
	Quiniæ Sulph.	ʒjss.

M.
Make a solution.

A teaspoonful in water every two to four hours.

Phlegmonous Erysipelas, in addition to the local and general treatment above described, usually requires deep and free incisions. Dilute solutions of carbolic acid and of permanganate of potash, are advised locally, conjointly with the internal administration of the sulphite of soda.

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Art. II.—*Hospital Notes*, by C. C. F. Gay, M.D., Surgeon to the Buffalo General Hospital.

Varicose Ulcers. Case 1.—B. H., aged 60 years, has an ulcer upon right leg near ankle, of two years standing, measuring two inches in length by one inch in breadth. The ulcer is caused by varicose condition of the veins of the leg.

The remedy that suggests itself for the cure of the ulcer is the remedy for the cure of the varicose veins. Five eschars were made with the potassa cum calce, poultices were applied, and in six weeks the patient was discharged, well. The ulcer healed simultaneously with the healing of the eschars.

Case 2.—Mrs A. B., aged 39 years, has two ulcers, the largest measuring three-quarters of an inch by two inches. These ulcers are the result of varicose veins, and will not heal until the veins are obliterated by the caustic potass. The ulcers have existed for a year or longer, and are increasing in size. She has resorted to treatment by poultices and lotions without benefit. On April 1st, 1871, five eschars were made. and in three weeks time, when the eschars were healed, the ulcers were also healed, and covered, apparently with as healthy integument as that contiguous to it.

Case 3.—Mrs O., aged 55 years. This patient has ulcers at ankle joint, one of which is two inches in diameter. She has also varicose veins of both legs of long standing, she thinks since childhood. On June 3d the potassa cum calce was applied for the obliteration of the veins. Eight eschars upon the left leg and five upon the right leg.

The caustic was used in the following manner: Adhesive strips, through each of which a hole was made the size of a small pea, were applied directly over the vein to be obliterated. The potassa cum calce, pulverized, was added to just enough alcohol to make a paste. This paste was applied to the vein through the small opening made in the adhesive strap, and allowed to remain twenty minutes, when it was removed, and the surface washed with vinegar. The after treatment consisted simply of slippery elm poultices. One week after eschars were made, simple erysipelas attacked both limbs. This disease was prevalent in the hospital at the time, but on the 30th June I have noted that the ulcers are healed.

Thus it happens that eschars produced in the manner described accomplishes a two-fold object at once, the cure of varicose veins and the cure of varicose ulcers. Of the several cases treated at the hospital there has not been a failure in a single instance, and in no other case has there been any dangerous complication, such as intercurrent erysipelas or phlebitis. Eight eschars upon one limb are, perhaps, too many for safety. I think it would be better to use but five, and repeat the operation if this number did not seem sufficient to obliterate all the veins requiring obliteration.

Strangulated Inguinal Hernia—Operation—Death.

Mr. G., aged 24 years, entered hospital May 16th. In the afternoon of that date Dr. Miner had visited him at his room and attempted to reduce an inguinal hernia by taxis. Failing in this, he divided the stricture external to the sac, which he observed permitted reduction of the tumor, but that action of abdominal muscles caused partial return. The patient was now sent to the Hospital. At my visit next morning, found the patient suffering greatly with pain, he was vomiting, had fever, and the scrotum much distended by the hernial sac. Chloroform was administered, and a failure made to reduce the hernia by taxis; cold applications were ordered, and morph. hypodermically. I immediately called together members of the staff for consultation, the result of which was to do nothing further at present.

On May 20th, there was erysipelas slightly diffused over the abdomen, vomiting and pain with febrile action. On consultation again with members of the hospital staff it was thought possible, from continuance of the symptoms that stricture might be found in the neck of the sac itself; and, assisted by Dr. Miner, I re-opened the wound, and on opening into the sac a large quantity of serum escaped. Tracing down with the finger, I found as had been anticipated, besides constriction of the ring, contraction of the neck of the sac. This was fully relieved by pressure of the finger and knife, but after all, the intestine could not be returned. Upon further examination the intestine was found everywhere adherent to the sac, and the sac to the surrounding parts, so that it could not be fully returned. These adhesions were with difficulty broken up with the finger, when the protruding bowel was made to return within the abdominal cavity, and did not again escape. The patient succumbed on the 23d, three days after the operation.

Operation for Radical Cure of Inguinal Hernia.

S. M., aged 8 years, hernia of right side, is congenital. On April 15th, 1871, assisted by Dr. Harrington, house physician, I operated, although the case for operation was very unpromising. Before beginning the operation I stated that it might not be completed on account of the apparent absence of a firm inferior pillar; it felt to the finger like a soft portion of protruding integument, therefore, I thought when the needle penetrated it that it would tear through the margin, or that there would not be sufficient strength in the pillar after the silver wire had been introduced to enable me to draw the superior and inferior pillars in apposition. However, the operation was satisfactorily completed, and gave good promise of radical cure. On May 9th the patient was allowed to get up and run about the wards. The patient was examined daily and not the slightest protrusion was discoverable until the 21st when I was showing the case to members of the staff. I saw for the first time some degree of tumefaction, which, on examination, proved to be the bowel again making its way through the ring. Undoubtedly the failure of the case was entirely owing to the abnormal condition of the interior pillar described above. Whether or not the bowel will again work its way and descend into the scrotum is not yet determined, but it is to be presumed that the bowel will again descend unless prevented by the application of a truss. The ring is partially closed. It is to be regretted that a second ligature or suture, had not been employed ; undoubtedly two sutures would have maintained the pillars in apposition, and in time, say six or eight months, the ring would have been permanently closed. A truss may now be used with much more hope of ultimate success, and will accomplish its object in much less time with the aid of the operation than without it.

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ART. III.—*Clinical Lectures upon Surgical Cases in the Buffalo Hospital of the Sisters of Charity.* By PROF. J. F. MINER.

Reported by Louis Brecht, member of the class of 1871-72.

CASE V.—*Caries of the Bones of the Foot.* D. Gleason, aged 21 years, admitted into the Hospital about three months ago, for the treatment of an abscess on his right foot. At the time of his admission he was able to walk with slight difficulty, but soon after became unable to do so and was confined to his bed. You will now observe a large unhealthy opening which has the appearance of communicating with dead bone. The opening is situated directly above the Scaphoid and internal Cuneiform, and it is possible that these are in a state of decay. A spicula of bone escaped this morning through this opening, but from which bone it came is uncertain. The patient is tired and disgusted with his foot, and has urged me to adopt such measures as would lead to a radical cure. The patient has resolved to submit to any operation except amputation, and I propose removal of whatever bones may be found diseased. Excision of the bones of the foot, is comparatively a new operation, and was not thought of until about thirty years ago.

All cases of caries, involving these bones were formerly treated by amputation. Recently, the subject has received more attention and authors favor the method of exsecting some, or even all of the small bones. It was thought that incisions into joint cavities were unsafe on account of dangers of inflammation, profuse suppuration, absorption, erysipelas, &c. Added to this, it takes a very long time before the foot will get well, while after amputation quicker recovery may be expected. Such cases are sometimes left to the resources of nature; but nature at times is very slow, and the majority of patients have not the means or patience to wait for it. As I introduce my finger through the opening for the purpose of ascertaining the extent of the disease, (the finger being the best probe) I find that not only the Scaphoid and internal Cuneiform are involved but also the head of the astragalus, the middle and external Cuneiform and all require removal. The foot will shorten some, and the cavities caused by the excision of these bones will fill up with a cartilaginous mass which may possibly in time become ossific in greater or less degree. Should the result prove favorable, the operation will indeed be an achievement in surgery, but a favorable result is somewhat doubtful. The patient has a pale and anemic countenance, a weak constitution, and will, perhaps, be unable to bear the exhaustive drain upon the system. The afterdressing will consist of dilute carbolic acid water lotions, which act both as a disinfectant and stimulent to the parts. Good diet and general good care are indispensible.

CASE VI.—*Concussion of the Brain.* Robert Henderson, aged 35 years, a laborer by occupation, fell a few days ago through the hatchway of a vessel, a distance of about sixteen feet. He struck on his forehead, which at the time was supposed by attendants to be fractured. Upon examination on the following morning, I could find no depression or fracture. I found him in an insensible condition, breathing heavily, and it was impossible to arouse him out of this stupified condition. His pulse was weak and frequent, and the pupil normal. The question which presents itself to the surgeon in making his diagnosis in such cases is; "Is there concussion of the brain, or does the patient suffer from compression?" This question is of great importance, and has often puzzled the most experienced surgeons. You cannot, therefore, make yourselves too familiar with the differential diagnosis, and we will here mention some of the symptoms. In concussion we have generally but partial insensibility, breathing not sterterous, pulse weak and intermittent, the voluntary muscles weakened but not paralyzed, and the pupil usually contracted. In compression we have depressed bone or an effusion of blood or serum which presses upon the brain, and renders the patient comatose. The breathing is sterterous, and the pulse often very slow and irregular, while the opposite side of the body to that where compression has taken place is often paralyzed. The patient referred to was soon after the injury brought to the Hospital, and to-day, three days after the accident, we find that his condition has generally improved. He gives some signs of feeling, and when aroused and spoken to, seems to take notice of it, and gives a muttering sound as if attempting to answer. He takes food and drink to some extent. By comparing these symptoms you will at once recognise the condition as probably concussion of the brain. After observing the case and hearing what I have said of the symptoms of concussion and compression, you will at once perceive that the distinction in tipical cases is plain enough, and you will also see that the conditions frequently approach each other so nearly that the surgeon may have to watch the progress of the case before he can make positive diagnosis.

Case VII.—*Spinal Curvature.* The little patient, presented to you this morning, is affected with angular curvature of the spine, and associated with it is quite well marked lateral curve. You observe that the lumbar vertebræ form nearly a complete arch, which is due to pathological changes having taken place in the bodies of these vertebræ. Various theories have been advanced as to the character of these changes. They have been supposed to be scrofulous and tubercular in character—to arise from a peculiar constitution or diathesis, and tubercular deposits have been thought to be in and around the bones. This theory is quite prevalent, and is generally adopted by the majority of the profession. Still I am not prepared to accept this theory at present. Recent observation and investigation go far to disprove this theory. Virchow, and other pathologists have examined the effused products in these so called tubercular deposits formed in and around the spinal curve, and find nothing unlike the products of inflammation. Again, the clinical history of such cases shows almost conclusively that it is not tubercular in character, such cases more often recover. Tubercular disease is almost uniformly fatal. Most of the cases of spinal curve can be traced to fall or injury, and this appears to me much more probably the true cause.

I have had ample opportunity to trace the clinical history of such patients, and have found that they had received injury to which the disease might fairly be attributed. In the treatment of this disease cod liver oil, and all similar remedies have been largely recommended with the view of treating it as a constitutional affection. Cod liver oil may be very proper, but will entirely fail to produce satisfactory results. Hygienic treatment, rest, and a support, made in such manner as to relieve the weight of the body above the curve, will be of much greater value. Indeed, proper support by mechanical means is the chief indication.

Miscellaneous.

An Oakum Respirator.

By Somerville Oliver, M.D.

Having witnessed the excellent results of the application of carbolic acid and also of oakum in the treatment of wounds and other lesions, it occurred to me that, in cases of phthisis and chronic bronchitis attended with purulent or muco-purulent expectoration, and also in cases of pyæmia, the purulent or muco-purulent matter would probably be diminished, and the condition of the patient otherwise improved, by the habitual use, for a time, of a "respirator," (if I may so term it) consisting of fresh oakum, or woollen cloth impregnated with carbolic-acid solution. The idea was still more impressed on my mind when a non-professional friend in Glasgow incidentally told me that those persons engaged in splitting rosin-barrels into fragments for firewood are remarkably exempt from disease, especially of the zymotic class; and that they themselves attribute their comparative freedom from disease to their special vocation.

I therefore made a rude sort of "respirator" by filling a small net (such as is worn by ladies over their chignons) with oakum; and in a few cases in which I have experimented with it, benefit has, I think, obviously accrued. Perhaps some of my professional brethren who have better opportunities than myself may make trial of the oakum or carbolic respirator, and observe the result. It may even prove useful in empyema, when the pus has found its way from the pleural cavity into the lung, in the usual way. I tried oakum rather than carbolic acid simply because I believe that the creasote of the tar acts at least as energetically as carbolic acid in destroying the minute putrefactive organisms of the atmosphere during their passage through the respirator towards the lungs, and because the oakum does not require to be changed so frequently as the woollen cloth or lint impregnated with carbolic-acid lotion.

My reason for suggesting pyæmia as a case in which a carbolic acid or oakum "respirator" may be used is, that I imagine that the inspiration of either of the antiseptics may in some measure prevent further deterioration of the blood, and also of the purulent deposits in various parts of the body, especially in the lungs. Instead of wearing a respirator at night, a quantity of oakum in a net may be merely placed on the pillow before the patient. And, though oakum or carbolic acid be used as advised, other means need not be set aside in the treatment of any case.

Oakum and carbolic acid appear to be useful chiefly in those conditions where there is a tendency to production of pus or actual formation of it; and this seems to be the reason why oakum and carbolic-acid solution are apparently less valuable when applied to the indolent ulcer than they are to most other sores. The *pressure* of the *callous margin* of the indolent ulcer interferes with the production of healthy granulations, or prevents their formation altogether; consequently it also interferes with the production, or entirely prevents the formation of pus; and the way in which the pressure of the callous margin of the ulcer prevents the formation of healthy granulations is indicated by the condition of the eye known as chemosis. In chemosis the cornea and its conjunctival layer are impaired or destroyed, it may be, chiefly by the obstruction of the circulation in the bloodvessels at the *margin* of the cornea; and in the case of the indolent ulcer, granulations are either not developed, or they are usually pale and flabby, owing in a great degree to the pressure of the callous skin around the sore on the subjacent *superficial capillaries* interrupting the flow of blood through them, and so interfering with the due nutrition of the ulcerated *surface.—Lancet.*

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Short Notes of Post-Mortem Examinations.—Vienna.

For these notes, and the following case reported from the Vienna General Hospital, we are indebted to Mr. Edward Sparks.

Primary Cancer of the Lungs.—A woman, aged twenty-two, died, as was supposed, from pleuro-pneumonia. On opening the throax, the right pleura was found to contain some false membrane, in which were imbedded several soft greyish-white nodules of encephaloid cancer. Similar small nodules existed in the lower lobe of the right lung, the apex of which contained a small bronchopneumonic cavity and some caseous infiltration of similar origin. The left upper lobe contained no cancer nodules, but was intensely congested towards the apex, and lower down was hepatised. The upper part of the lower left lobe was also free from cancer, but the lower two-thirds consisted of a huge mass of encephaloid nodules, one of which was as large as a man's fist. The growth extended towards the mid-line of the body, pushing the heart far over to the right. It projected also into the left pleura, and had infiltrated the diaphragm, so that nodules projected on its under side. No cancer was found in the abdominal organs, nor in any other part of the body except the thorax.

Caries of Vertebræ; abscess opening into the spinal canal; no paralysis.—In this case, caries of the bodies of the third and fourth lumbar vertebræ and destruction of the intervening fibro-cartilage led, on the one side to a large psoas abscess, and, on the other, to perforation of the spinal canal and entrance of pus into the latter. Although at the post-mortem the canal was found to be filled with pus below the fourth lumbar vertebra, so that the cauda equina was bathed in it, yet the man had not a trace of paralysis during his illness, and no implication of the spinal cord was even suspected.

Intra-pericardial Rupture of the Aorta in a boy of sixteen.—The subject of the necropsy died suddenly while at dinner. He was only sixteen years old, and was supposed to have been previously healthy. On opening the pericardium, a large loose blood-clot of the size of two fists was found distending it. The heart had a hypertrophied left ventricle, whose wall was an inch thick. The cavity was but slightly dilated. The mitral and aortic valves were healthy. Just above the aortic valves was found a small irregular rent in the adjacent aortic wall—all but over a patch of advanced atheromatous degeneration. The intima was slightly saculated at this point. On the pericardial side of the aorta existed a larger tear, through which the blood had made its way into the pericardium. On closer examination it was found that at the point where the aorta was penetrated a dissecting aneurism had been formed. The blood, after rupturing the intima, had split the media into two parts, so that one-half remained adherent to the intima and the other to the adventitia; finally, it had broken through the latter also. This case is interesting from the early age of the patient at which atheroma led to a fatal issue.

Disease of Tricuspid and Pulmonary Artery Valves, without Affection of the left heart.—The patient, a man of twenty-seven, died suddenly in a state of extreme cyanosis. There was no history of any previous illness. On opening the pericardium, the heart appeared quite round from distension of the right side with blood. The mitral and aortic valves and the left cavities were found perfectly healthy. On the right side, however, the ventricle was so dilated and thinned that its wall appeared to be made up almost entirely of endocardium and peri-cardium, through atrophy of its muscular substance. The endocardium was opaque and thickened. The tricuspid valve was insufficient, its segments thickened, and its free borders beaded from endocarditis. The pulmonary artery was very narrow where it left the ventricle, with valves shrunken up to its walls, and adherent by their edges, so that the orifice could not be closed at all. This was probably a case of congenital stenosis of the pulmonary artery, followed by disease of the tricuspid and ventricle later on, just as in another congenital abnormity of the heart—transposition of the vessels—the transposed aorta becomes the subject of endocarditis.—*Lancet.*

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The Treatment of Drunkards.

An article in a recent number of *Macmillan's Magazine* gives an interesting account of one of the asylums for drunkards of which several have been founded with great success in America. The American laws, more paternal than our own, recognize the necessity for guarding the habitual drunkard against himself, and do not leave him at large until drink has ended in crime. Thus we find that "the committee of an habitual drunkard, duly appointed under the provisions of the laws of the State, can place such habitual drunkard in the asylum, and authorizes his detention under such restraint as may be necessary to prevent his escape." A large proportion, however, of the inmates of these asylums are voluntary patients who place themselves there with a view to self-cure.

The New York State Inebriate Asylum has been in active operation since May, 1867. From that date to the end of 1868 the number of admissions was 310; 272 being paying patients, and 38 free. Of these patients, 147 were classed as periodical and 163 as constant drinkers, and the following were their antecedents: 96 had delirium tremens, 31 convulsions, and 73 other diseases; 101 were in good health, and 9 were supposed to have an hereditary tendency to intemperance. The average length of time each patient remained in the asylum was ninety-six days; 113 were reformed after a first trial; 11 relapsed, but were reformed after a second trial; whilst 4 relapsed a second time, but were reformed after a third visit; 25 were discharged hopeless; and of the remainder, in 68 the result was not known, whilst 3 were discharged insane and 4 died.

The asylum is described as a palatial hotel, situated on the top of a hill, with commanding views. No special treatment is adopted beyond a total disuse of intoxicating liquors, and restraint within the boundaries of the establishment is only moral. The patients breakfast at 8 A.M.; attend prayers, and then amuse or employ themselves as they please till a one-o'clock dinner; supper is served at 6 P.M.; and the evenings are occupied with "readings," dramatic representations, or, one evening in the week, a lecture on temperance by the superintendent, Dr. Albert Day. No restriction is placed on the use of tobacco, and it is consumed in enormous quantities; coffee, also, is very largely consumed.

Permission to pass beyond the bounds of the asylum grounds can only be obtained from the superintendent, who judges of the amount of self-control acquired. Occasionally a "break-out" occurs, the patient usually returning at the end of his debauch, and being then placed in confinement for a day or two. Dr. Day insists upon the necessity for *total* abstinence after quitting the asylum; and maintains that "he has never known a man who had been intemperate to be able to drink at all without falling again into excess." We echo the wish of the writer in *Macmillan* that institutions of a kind similar to this asylum were established in this country.—*Lancet.*

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On Sesquichloride of Iron as a Prophylactic of Acute Rheumatism.

By Dr. Anstie.

A considerable space of time has now elapsed since the announcement, by Dr. Russell Reynolds, of his observations on the successful treatment of acute rheumatism by large and frequent doses of the tincture of sesquichloride of Iron. I do not know to what extent this plan of treatment has become generalized; but there have been a good many reports in the medical journals of its employment in different hospitals; and the balance of evidence derivable from these seems distinctly favorable to the method. My own experience of it in fully declared acute rheumatism has not been large. I have treated six cases altogether with the sesquichloride, and in four of these I think the results distinctly bore out the main assertions of Dr. Reynolds, as to the prompt relief of the pains, the limitation of the extent of the mischief, and the shortening of the illness; in the other two, the medicine seemed to have no special effect. But it is not of the use of the sesquichloride in the fully developed acute rheumatism that I now wish to speak. My opportunities of seeing disease on a large scale being chiefly those afforded by the out-patient room, it is rather the first advancings and threatenings of acute rheumatism, than the declared disease, that I am in the habit of seeing. A considerable number of persons present themselves in my out-patient room, during the course of twelve months, suffering from the preliminaries of acute rheumatism; it is one of the small group of really serious diseases (amongst a much larger variety of trivial complaints), which occupy one's attention in out-patient practice, and was formerly a matter of great dissatisfaction to me, from the apparently almost total failure of remedies to produce any effect. Whereas threatenings of gout could be very commonly dealt with in such a manner as to prevent the attack, or render it trivial, the onset of acute rheumatism seemed never to be averted by drugs when once the prodromata had reached the stage which pretty frequently presented itself before me, viz., a more or less obscure aching of several joints,* a yellow sallowness of face, with patches or streaks of dusky redness, blanket-like furring of tongue, an oily moisture of of skin, a distinct though slight elevation both of pulse and temperature, and a certain anxiety of respiration. So far as the history of such patients could be traced, they were almost invariably found to have developed the full symptoms of the acute disease, and very often (after once seeing them in the out-patient room), one encountered them, a few days later, in a ward of the hospital.

Very different have been the results of treatment since I adopted the use of full doses of sesquichloride of iron from the first moment of such cases presenting themselves. During the past twelve months I have done this fully. Whenever a patient has presented himself with articular pain and slight fever that were plainly of the rheumatic and not of the gouty type, he has been at once placed on thirty or forty minims doses of the tincture of sesquichloride, from three to six of which, according to the severity of the symptoms, have been given in each twenty-four hours. I have several times called the attention of the students to the fact, that (unlike what used to happen), these cases now reappear in my out-patient room on my next hospital day; and in the great majority of instances declare themselves greatly relieved. Since July, 1870, I have treated twenty-nine such patients, of whom thirteen had previously had one or more regular attacks of rheumatic fever, for the symptoms now referred to, with full doses of iron; and of these, seventeen have lost all pyrexia and spontaneous joint-pain, within the three or four days elapsing before my next day at the hospital. Only three have, under my own eyes, developed the full acute disease, and been sent to the ward. Of the remaining nine, four disappeared altogether from my knowledge, so that I cannot say what became of them; the other five, though their symptoms were checked, remained in a state of what might be described as subacute rheumatism, during from ten to twenty days.

I cannot help remarking with emphasis on the contradiction to old ideas which is involved in the effect of this iron treatment upon the furred tongue. Of course it becomes speedily blackened; but so far from the furring increasing, or the dryness and foul taste becoming more pronounced, what commonly happens is, that after a few days the epithelial coating falls off in considerable patches, and the tongue soon cleans altogether. I believe the prophylactic treatment of rheumatism by the sesquichloride to be one of our most valuable recent improvements in medicine.—*Am. Practitioner.*—*Medical Archives.*

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On the Physiological action of Bromide of Potassium.

In the *Archives fur Heilkunde*, Heft 2, 1871, is an elaborate paper upon this subject by *G. I. Schouten*, an extended abstract of which is contained in *Allgemeine Medicinishe Central-Zeitung*, June and July, 1871. From this abstract we give a condensed translation, omitting the historical portion.

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* I have, on the contrary, known pain in or near a *single* joint (sometimes simulating neuralgia), with slight fever, sallow skin, etc., yield to iodide and bicarbonate of potash.

Grandeau's observation, that even small quantities of potash salts injected directly into the blood cause almost immediate death, has been confirmed by almost every observer, for following such injection comes heart-paralysis, with consequent cessation of the circulation and death, artificial respiration being powerless to re-excite the heart's action. On opening the thorax, if but a small amount of the potash salt has been used, spontaneous contractions are often visible, sometimes of the whole heart, more often of the auricle alone; if the dose has been a little larger, the ventricle is always found still, but excitable by electrical stimulation. When a very large amount of the salt has been injected, the whole heart is perfectly quiet and insusceptible to electrical excitation. If the thorax of a kitten be so opened that the heart's movements can be watched and a two per cent solution of bromide of potash be slowly injected into the jugular vein, the motion will be seen to become slower, the pauses longer, and at last the heart stands still, or at least merely fibrillar contractions take place, no full systole. During the injection, however slowly it may be made, slowing of the heart's movements and lengthening of the pauses can always be observed, never acceleration of the heart-beat, although immediately afterwards the frequency of the pulse plainly increases.

The quantity that can be injected into the jugular vein of a cat without causing death is very small, and depends upon the strength of the solution and rapidity of injection. Of a one per cent. solution, some 50 c. c. (0.5 grammes of the salt) were injected into the jugular of a cat without causing death, but then an hour was required for the injection; a few c. c. of two per cent. solution always was fatal. In the crural veins, however, 25 c.c. of the latter solution were injected without lethal effects; but when the repetition of the injection was attempted three hours afterwards, the animal died suddenly so soon as 6 c.c. had passed into the vein. Twenty-five c.c. of a three and a half per cent. solution were injected into the carotid and femoral arteries without killing the cat.

The injection of the chloride of potassium was attended with similar results, whilst the bromide of sodium was without influence.

In the case of dogs the effects were similar, but larger doses of the potash salts were required to kill. Thus, the injection of 3 c.c. of a six per cent. solution of bromide of potassium in the jugular vein of a dog caused immediate death, whilst 30 c.c. of a six per cent. solution of chloride of sodium were rapidly thrown into the same vein without disturbing the heart's action.

One cat bore without injury the subcutaneous injection of six grammes K. Br., whilst in another death followed two days after the similar use of the same quantity. Ten grammes produced death in one and a half hours and the chloride of potassium appeared even more powerful than the bromide. Six grammes of bromide of sodium did not appear to exert any influence whatever. When given by the stomach, six grammes of the bromide of potassium do not cause death in the cat, but 10 grammes are speedily fatal. The dog will bear the latter quantity well.

By small doses, voluntary motion and reflex activity were not perceptibly altered. With larger doses there were very evident weakness and uncertainty of movement, and animal sitting still, and only moving when strongly urged to it. Tremblings of the muscles only happened after injection of the salt into the blood, especially into the carotid artery. The observation that the cautious injection into the jugular produces immediately lengthening of the intervals without any increase of the rapidity of the heart's motion, Dr. Schouten thinks it of great importance, as showing that the drug, when acting directly upon the heart, does not first produce excitement, and only after this paresis. The fact that much larger quantities are borne injected into the carotid than into the jugular, shows that the central nervous system is not so readily affected as the muscles. The experiments with the chloride of potassium and bromide of sodium show that Guttmann and Eulenberg were correct in attributing the action of bromide of potassium to the potash contained in it.

After all non-fatal doses of the bromide or chloride of potassium, even if so small as to have no perceptible influence on sensation or motion, there is constantly acceleration of the pulse. After injection into the blood or under the skin this increase came on quickly; on exhibition by the stomach, only after some time. The influence on the pulse is more apparent when the latter is slow than when it is rapid. When subcutaneous injection is used, the increase is almost in inverse ratio to the dose, being very much more marked after two to four grammes than after five to six. This does not occur, however, when the drug is exhibited by the mouth or thrown into the blood. If the animal survives, the increase of the pulse frequency passes off gradually, and is not followed by a falling of it below the normal rate. Bromide of sodium has no influence upon the frequency of the heart's action. Very large doses injected directly into the blood may indeed be followed by such increase, but it is so slight and fugitive as to be scarcely worthy of note.

3. *On the Influence on the Arterial Pressure.*—Kemmerich states that small doses of the potash salts increased not only the rapidity, but also the energy of the heart's action. He found the pulse fuller and stronger, and concluded that the potash salts, like other heart-poisons, had in small doses an exciting, in larger a paralyzing effect upon the heart, and that this paralysis was preceded by a stage of very strong stimulation of the heart-ganglia. Kemmerich did not, however, *prove* that the energy of the heart was increased. Even if the pulse felt more rapid and fuller, it is possible that the heart was really doing less than its normal work. Mere frequency of action is of no importance, and Dr. Schouten shows by experiment that just as *the pulse frequency rises so does the blood pressure fall.*

This is of great interest in connection with the therapeutical use of the drug. It was very difficult to reconcile Kemmerich's assertion that there was real excitation of the heart, with the clinically well-known quieting actions of the bromides.

In explaining the consentaneous increase in the rapidity of the heart's action and sinking of the blood pressure, the inter-dependence between the heart and blood-vessels, recently proven, is of great service. The nerves of the heart and of the blood-vessels exercise influence both upon the pulse frequency and arterial pressure. Is the blood-path anywhere enlarged, the arteries exert less resistance to the heart, and the blood pressure sinks, and at the same time, by the lessened blood pressure, the vagus centre is less stimulated, and the rapidity of the heart's action is increased.

The relation between the innervation of the heart and arteries is very complicated, and it is therefore very difficult to explain with certitude the causes of the observed weakening of pressure and increase of the pulse frequence. In order, however, to determine this, if possible, Dr. Schouten made various experiments. He found that after section of the vagi there was still increase in the rapidity of the heart's action. Immediately after the injection there was some slowing, but very soon the strokes began to grow more rapid. The pressure, on the contrary, was at first increased, and an hour after the injection had not fallen below the normal point. There is, however, a difficulty in this operation which cannot be surmounted. Division of both vagi and tracheotomy are very serious operations, which produce great disturbance in the system. One cannot, therefore, wait long after the operation. The fact that after the injection of the bromide of potassium, the pneumogastrics having been previously cut, the increased frequency quickly returns to the normal rapidity, gives ground for believing that if it had been possible to wait longer after the operation the increased frequency might not have occurred. The action of the bromide on the heart is then certainly not dependent upon the vagi nerves, although Dr. Schouten is by no means disposed to deny them all influence in the matter. The question, what influence the bromide exerts upon the innervation of the vessels and upon their tone, is not certainly answered; but Dr. S. believes that whilst positive proof is not forthcoming, it is very probable that relaxation occurs. When it is remembered that by the potash salts the voluntary muscles are injured in their functional power, the heart by even small amounts brought to a stand-still and its excitability destroyed, it seems most probable that the tone of the blood-vessels is lessened, even if the vaso-motor nerve-centres suffer no disturbance.

The action of the bromide, according to our author, happens in this way.

Under the influence of the bromide of potash a disturbance of nutrition occurs, so that in muscle and nerve the activity of tissue changes is lessened. The heart activity naturally suffers from this, but so does also the innervation of the vagus and vaso-motor nerves, by the disturbance of which the rapidity of the heart-beats is increased, but not sufficiently to bring up the otherwise lessened arterial pressure. The calls on the heart are also lessened, owing to the lessened functional and chemical activities of the nerves.

By large doses the capability of action is so diminished, that in spite of the action on the heart's innervation the pulse frequency sinks. In cats, under these circumstances, death rapidly ensues. In this animal the tissue changes in health are so slight that they cannot be materially depressed without compromising life. In other animals in whom tissue-changes are more active, life can be maintained much longer. The main point here, however, is *that the increase of frequency of beat does not really mean increase in the work of the heart.*

That the bromide of potassium does lessen the activity of the tissue-changes was shown by the experiments of Kemmerich After twenty days, a hound fed on cooked flesh with a certian amount of potash salt weighed 1,275 grammes more than another which had received the same daily allowance, except that a soda salt was substituted for the potash salt, and a reversal in the use of the salts caused a reversal in the proportional weight of the dogs, dog No. 2 soon outstripping No. 1 when the former received the potash, the latter the soda.

Another proof lies in the diminished respiration, which Dr. Schouten has noticed as a constant result of the use of the bromide ofpotassium.

So also points the quieting influence which the bromide has upon abnormally energetic action of the heart and of the nerve-centres.

Whether the bromide acts in any way differently fromother salts of potash, Dr. Schouten says he cannot say. It is certain that all of the potash salts have a similar influence on the pulse frequency and blood pressure; but whether one salt acts more intensely than another is not yet decided. Dr. Sasse has already called attention to one thing which must have influence on this point, namely, the more or less quick separation of the salt by the kidneys. According to Rabuteau, the iodide and bromide of potassium differ very much in this particular, the bromide of potassium being separated much more slowly, so that after four weeks it could still be found in the urine. Surprised at this statement, Dr. S. made one or two experiments, finding the bromide in the ashes of the urine, in one case, five days after the injection of 0.5 grammes into the jugular vein of a cat, and absent on the sixth day; in another failing to find it four days after the injection of 28 grammes! (So printed; evidently a mistake.)—*New Remedies.*

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A New and Important Therapeutic Property of Quinine.

The following conclusions are arrived at in a memoir of 277 pages, by Doctor Monteverdi.

1. The action of quinine and its preparations is especially upon the grand sympathetic nervous system.

2. This action causes contraction of the muscular fibres supplied by the sympathetic, particularly those of the uterus, urinary bladder, the intestinal canal, and the blood-vessels.

3. This action may be physiological according to the amount of quinine given. If the fibres are relaxed, quinine restores their tone, and enables them to perform their functions. If they are contracted and excited, quinine produces a rigid tonic contraction, which renders them unable to perform their functions.

4. This property is especially marked on pregnant women, on whom quinine must be used with care, as it is able to and frequently has caused premature labor.

5. In labor it may be often used with certainty and advantage to stimulate the uterine contractions, for which it is preferable to ergot for the following reasons: It does not injure mother or fœtus; it acts very rapidly and surely; it produces regular, intermittent labor pains, precisely normal in character; it may be administered at any stage of the labor, from before the bag of waters is ruptured or the os dilated, to the time when the head is on the perineum.

6. In cases of the retention of the placenta, either after labor or miscarriage, it is of great value, causing expulsion, and replacing manual assistance.

7. In menorrhagia in pregnant or confined women, it is to be preferred to ergot, as safer and more certain.

8. In amenorrhœa from uterine inertia, it is of great service.

9. In puerperal fever it is very useful, not only as a preventative, but also to combat victoriously the disease in its early stages.

10. In hysteria and hysteralgia it increases the uterine excitement, and more often is hurtful than beneficial.

11. In all the diseases of the digestive apparatus, or of the genito-urinary system, it is useful when they depend upon atony; if irritation or inflammation be present, it does harm. In the normal condition of the bladder it will sometimes cause such a rigid, persistent contraction of the neck, as to render the evacuation of urine difficult, or even impossible.

12. Small doses of quinine augment the force and frequency of the heart's action; large doses enfeeble it.

13. Opium and morphia are antagonistic to quinine, and are useful when it has produced toxic symptoms.

14. To produce physiological effects upon the uterus, to excite contraction, etc., 20–25 centigrammes (3 to 4 grains) should be given at each dose; to produce the paralytic effect, the dose should exceed a gramme (15.43 grs.).—*Annales et Bulletin de la Societe de Medecine de Gand*, May, 1871.—*New Remedies.*

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The True and the False Cundurango.

The favorable news which continue to come from the United States and other places of the virtues of this plant, renders it important to be able to distinguish the true Cundurango from other vines, which from a similar appearance are being substituted for it.

Dr. Chiriboga of Guayaquil, says, it is now fifteen months since I have made a particular study of the physical qualities and medical effects of the Cundurango, as well in the Hospital under my charge, as in private practice. I have observed attentively the action of this plant on various complaints, administered in the form of tincture, extract and decoction. I have proved to my own satisfaction that it has many admirable qualities, especially in the following :—

In Rheumatism (tendinous or muscular); in various Neuralgias; in Earaches and various skin diseases; in many diseases of the blood; in Cancerous diseases (saratanes), against which it may be looked on as a specific.

The astonishing improvement, obtained in two cases of open Cancer of the breast, and the complete disappearance of another non-ulcerated Cancer, as well as the marvellous curation of a cancer in the tongue of a gentleman who was once President of the Republic, and many other well attested cases, leave no room for doubt about the efficiency of the Cundurango in this terrible disease.

In the United States various publications have been made of the good effects of this plant in cancerous affections, even with the small quantity of Cundurango sent by the Government of Ecuador for that purpose; so much so, that speculations in the plant are now the rage, but unfortunately frauds have already been introduced and will tend to discredit this great discovery.

Whether from ignorance in some or cupidity in others, large quantities of a spurious species have been introduced into the market and particularly one, known by the name of *VejucoPachon*, to be exported as the true Cundurango, not being so in reality.

The former vine, it is true, belongs also to the family of *Asclepiaceæ*, being dicotyledenous gamopetalous, a climbing milky shrub, native of America. One of the number of the various species is cultivated in the gardens in Europe (Asclepiadea Syriaca) and known by the name of wild cotton or silk plant from the silky fibres, to which the seed are attached. The properties of this numerous family are so varied, that some are emetic, others tonic, anthelmintic, &c. It is only the Cundurango, which besides being tonic, deobstruent and diuretic, is distinguished by the singular and providential quality of being *anticancerous.*

Speculators in the plant ought to be careful to get the right species. Besides the botanical character, by which it is distinguished and the smallest quantity of the resin, peculiar to the Cundurango, evident at first sight, the following peculiarities may be useful to distinguish the two vines:—A concentrated decoction gives no reaction with test paper. That made with the *Vejuco Pachon* is slightly alkaline. That of the Cundurango, treated by ammonia gives a fine orange yellow tint, whereas the other yields a greenish yellow.

The Cundurango gives out an odor of pyroligneous acid treated by concentrated nitric acid, which is not the case in the other vine.

The decoction has a straw color and a characteristic odor, somewhat balsamic like nutmeg, which by itself distinguishes it from the other, which is turbid mucilagenous and inodorous.

There are two more species of Cundurango, one a pale yellow and the other black. The use of the latter requires much precaution in the doses given. The above characters are meant for the white Cundurango.

The bark is generally used, as the woody fibre is too weak.

For the information of the Medical profession the above observations, published in the "*Andes*," at Guayaquil, have been translated and are respectfully submitted.

GEORGE J. WENCK, *Chemist*.

381 Sixth Avenue, N.Y., November 1, 1871.

Resolutions of the New York Academy of Medicine

At a meeting held on the 21st of September, 1871, the following preamble and resolutions were unanimously adopted:—

Whereas, In charging the grand jury on September 6th (inst.), Judge Gunning S. Bedford said: "Of late, we have been living in an atmosphere of abortion. The very air is indeed heavy with the dark deeds of those heartless and unscrupulous specimens of human depravity, professional abortionists. Let the warning word this day go forth, and may it be scattered broadcast through the land, that from this hour the authorities, one and all, are to put forth every effort, and strain every nerve, until these traffickers in human be exterminated, and driven from existence, by fully vindicating the majesty of the law in all of the e cases of its fiendish violation. Let me express the earnest hope—shared in, as I feel confident it will be, by you and by all right minded citizens—that the legislature at its next session will amend the statute-book, so that instead of reading "any person who shall administer to any woman with child, or prescribe for any such woman, or advise or procure her to take any medicine, drug, substance, or thing whatever, or shall use or employ any instrument or other means whatever, with intent thereby to procure the miscarriage of any such woman, unless the same shall have been necessary to preserve her life, shall, in case of the death of such child or of such woman, thereby produced, be deemed guilty of manslaughter in the second degree," it may read, "*shall be deemed guilty of murder in the first degree.*" Then the punishment would be death. Now, the crime being simply manslaughter in the second degree, the punishment is only imprisonment, not exceeding seven years:"

Resolved, That, in the opinion of the New York Academy of Medicine, the author of that language has, by so public a declaration of his sentiments, his intentions and his hopes, given us reason for renewed expression of highest commendation, has vindicated the already widely-expressed support from the medical profession of the country, of the course he has hitherto pursued, and has, we trust, greatly strengthened the esteem and confidence in which he is held by the public.

Resolved, That this Academy, in the discharge of the duty its professed objects commend—to promote public health and public morals—pledge all its influence and efforts, in support of any legislative or other measures which our law-officers may propose, as offering a reasonable promise of mitigating, if not removing, the pestilence of criminal abortion which is upon our country.

Resolved, That to remove all doubt from the public mind, in regard to the position of the New York. Academy of Medicine in this important matter, to secure the influence upon the State authorities desired by this expression, and to stimulate the medical profession generally to similar acts, a copy of this preamble and these resolutions be forwarded to Judge Bedford, to District Attorney Garvin, and to the New York Bar Association; that the leading daily papers of this city, and its medical journals, be furnished with the same; and that the secular and medical papers and journals throughout the country be requested to copy.—*N. Y. Medical Journal.*

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Resolutions of the Albany County Medical Society Relative to Abortion.

Dr. T. D. Crothers offered the following resolutions, which were unanimously adopted :—

Whereas, The subject of Criminal Abortion is agitating the public mind, by the late astonishing disclosures of its prevalence, and that in our vicinity, as elsewhere, unscrupulous specimens of human depravity, professional abortionists, are plying their fiendish traffic, and from the members of the medical profession is expected a public expression of their position in regard to this widespread evil, therefore

Resolved, That we recognize the procuring of abortion as criminal in the highest degree, unless absolutely demanded for the purpose of saving human life.

Resolved, That, as physicians seeking to obviate the cause of many intractible diseases which are met with every day—diseases which destroy the physical powers and undermine the foundation of truth, morality, and happiness of society—we pledge all our efforts to support any legislation, or other measures, which our law officers may propose, and which promises to mitigate, if not remove, this infamous practice and the fearful consequences flowing from it.

Resolved, That we are bound, by a sense of duty as citizens and physicians, to condemn the abortionist, his associates and abettors, and deem them unworthy of our association, respect, or notice, using all means in our power to expose their nefarious schemes and bring them to punishment.

Resolved, That we not only denounce this traffic in human life, but try to infuse into the public mind a proper understanding of the fearful and inevitable punishment which follows this violation of the physical laws, believing that, with the aid of an intelligent people, this reform, so much needed, would be rapidly brought about.

Resolved, That a copy of this preamble and resolutions be forwarded to each of the daily papers of this city, with a request for gratuitous publication; that the position of the Albany County Medical Society be, beyond all doubt in this important matter, and to secure similar expressions from other societies and the profession generally throughout the State.

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Where shall we send our Consumptive Patients?

Every day the enquiry is made as to what locality on this coast is best adapted for a sanitarium—a place for convalescents, invalids, and consumptives. That no one locality will suit all cases is a palpable truth. An individual threatened with phthisis might find health in the mountains, during the summer, where he might even "camp out" with benefit; or a journey in the saddle, or a sea voyage might restore his health. The same may be said of persons affected with dyspepsia and similar disorders. But delicate females, and consumptive patients in more advanced stages of disease, must seek relief elsewhere. The summer winds of the bay and ocean climate are too chill; the interior is too hot and debilitating. There is a middle region, a narrow district skirting the bay, enjoying a medium climate. It embraces portions of the counties of Marin, Sonoma, Napa, Contra Costa, Alameda, Santa Clara, and San Mateo. But this is so often a battle-ground between the two climates, in which wind and mist on the one hand, and a broiling sun on the other, triumph alternately, that it does not supply the need. In the southern counties of the State is a range of territory some miles inland from the coast, which enjoys a more equable climate, both in summer and in winter. Los Angelos and San Diego are the two most attractive localities in this range, and the inhabitants of each place think their town the most salubrious spot on the globe. San Diego is more exempt from summer heat than Los Angelos, and being nearer the ocean, has a more equable winter temperature. The inhabitants have secured a large stock of thermometers and pluviometers, and have become xealous meteorologists, and determined to demonstrate the unparalleled sanitary virtues of their growing burgh. Thus far San Diego has the lead in the race, and presents the strongest inducements to valetudinarians.—*Pacific Medical and Surgical Journal.*

The Value of Meat Extract.

Meat, as an article of diet, owes its value partly to the mineral, partly to the organic compounds, albuminoid and oleaginous. The mineral substances probably undergo little change in the human body, and with the oleaginous we do not now concern ourselves; but the albuminoid having been ingested, are in the stomach reduced to a uniform substance, termed albuminose or peptone, by means of the acid and pepsin of the gastric juice. But straightway the process of degradation commences, and a multitude of new compounds, kreatin, kreatinine, leucin, etc., are formed; but the force evolved in the changes is the force manifested by the body—in other words, life implies these changes. Let it be noted now that in the *substance* of meat there is available material over and above what exists in its juice.

In the extract, substances which exist only in very small quantity in the meat are increased a hundred-fold, whilst the really important and nutritious substances are actually diminished. Animals have no constructive power that resides in vegetables. Albumen having ceased to be albumen, it can never be again converted into albumen in the animal economy; it can only proceed in its retrograde march to urea. This being so, it is evident that the nutritive value of meat in regard to its albuminoid constituents must be small. Some time ago Kimmerich astonished and, we may say, frightened the world by announcing that Liebig's extract was absolutely poisonous. In a recent article, however, *(Deutsches Klinick)*, he has considered the subject, pointing out the actual value of the extract. First, then, it causes a sensation of warmth in the stomach, it strengthens the heart's action and the circulation generally, acting as a stimulant rather than as an article of food. In its action it is allied to tea and coffee rather than meat. So also in cases of sickness will the solution of the extract, properly flavored, prove of value as a stimulant, in the same way that a glass of wine will enable a man, immediately after he has taken it, to do what he was not able to do before. But, however useful in debility, it is now well known that wine is not food, and so also with meat extract. The real use of the meat extract, as an article of diet, is to give taste and relish to a mass of nutritive but insipid food. A patient will swallow large quantities of this extract, thinking he is imbibing nutriment proportional to the quantity of meat used in its preparation, while in truth he may swallow several ounces of it daily and yet be starving. A bone boiled with it for a time is a great improvement; thickening it with *corn-meal,* not starch, makes it of very great value.—*Medical Times and Gazette.—New Remedies.*

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The Action of Mercury in Children.

By W. L. Nichol, M.D.

At a late meeting of the Medico-Chirurgical Society of Edinburgh

Dr. Stephenson read a paper on this subject, of which the following is a brief abstract:

He remarked that recent physiological experiments tended to prove that mercury had no direct stimulant action on the biliary secretion; but, so long as these experiments were made only on healthy organs, they could never demonstrate that it had no effect on the pathological conditions which were interfering with the performance of the function, and the result of such experiments would never overturn its use after the manner of a rational expiricism. An analysis of its action in the intestinal affections of children showed that its good effects could be explained on other grounds than its mere cholagogue action; and, although this theory of its action was erroneous, mercury was still of service. Its use, however, should be limited almost wholly to its action as an occasional purgative. When given to produce its constitutional effects, the constitutional type or diathesis greatly determined its action. It was in subjects most liable to those external diseases where mercury was of service when applied externally, that internal affections were most likely to be omenable to its constitutional use. From the consideration of its internal use, illustrated by cases, the following conclusions were drawn:

1. Mercury may be employed to influence the constitution without any injurious effect on the general health.

2. To obtain its therapeutic action, it is not necessary to produce its visible physiological effects; it becomes injurious so soon as these are manifested.

3. It is an error to suppose that children are less susceptible to its influence than adults; its effects are not to be looked for in its action on the mouth, but in its depressing effects, and in deterioration of the blood.

4. It should be used only so far as is necessary, and in order to stimulate the nutritive changes in the tissues, not in the character of the constituents of the blood; for this purpose it should be used as a whip or spur only—that is occasionally and at intervals, not continuously throughout the whole course of the disease.

5. Its use is modifying acute inflammatory action is very limited, and requires further observation; but there is no question as to its power over the products of inflammation, in starting the processes of resolution and absorption where these have been arrested; and, where other remedies fail in producing a change on morbid nutrition, it does in certain cases succeed in promoting a return to healthy action.

6. No number of cases improperly treated by mercury, no number of "constitutions shattered by its abuse," no number of instances where disease has been cured without it, can in any way invalidate the results of its effects, where it has cured where other remedies have failed, or lessen in any measure the position here defended of a judicious use of the medicine. In infantile syphilis, the author has the greatest confidence in the good effects of mer-

cury, but limited its use, as in other diseases, and stopped it whenever amelioration in the symptoms was observed, renewing it, if necessary, and not giving more than one or two grains of gray powder daily for a fortnight.

Dr. George Balfour remarked on the interesting and practical nature of the paper, and agreed with the author's views on the treatment of chronic cases of pneumonia with mercury.

Dr. Bennett had considerable difficulty in criticising a paper which discussed such important topics, containing as it did much assumption and little fact. What the author understood by "rational empiricism" he did not know; but, for his own part, he would define it as experimental theapeutics, based on a knowledge of anatomy and physiology. Dr. Stephenson maintained that mercury was not a cholagogue, and had no influence whatever in causing bilious stools in children. He also maintained that jaundice in children yielded to the simplest treatment. As he (Dr. Bennett) agreed with the author on these points, he need not dwell upon them. But Dr. Stephenson supported the ideas of those who maintained calomel to be a sedative, and had stated that eight or ten grains of calomel in an adult, and three or four grains in a child, when mixed with sugar and placed on the tongue, at once checked obstinate vomiting. In India, much larger doses, viz., thirty grains, had been recommended as a sedative in dysentery and cholera. He (Dr. Bennett) believed such practice to be of no benefit, but, on the contrary, to be dangerous. If placed on the tongue and not swallowed, mercury was likely to produce violent stomatitis and salivation, such as occurred in the man Holden, whom he had presented to the Society at a former meeting. Dr. Stephenson also supported the employment of mercury in the syphilis of young infants. He (Dr. Bennett) did not consider it to be of any service in such cases, nor in those of diphtheria. Further, Dr. Stephenson called it a stimulus to the tissues, said it acted as a whip or spur in chronic inflammatory diseases, and had given three cases as examples. They were quite insufficient to support such a proposition, which, if extensively followed, would, in his opinion, be productive of great mischief. Dr. Stephenson had stated that mercury increased cell-growth and caused proliferation of cells. But did he possess any facts or series of preparations capable of supporting this assertion? Such an idea also appeared to be opposed to what was said in the first part of the paper; viz., that it caused anæmia and destruction of tissue. What was at present required in therapeutics was an effort to distinguish between the supposed action of remedies and the spontaneous cure of diseases. Wherever this, in recent times, had been carefully carried out, it had been shown that in many diseases violent remedies, such as bleeding and mercury, were opposed to a rapid recovery. He referred to the diminution in the mortality and duration of pneumonia, since antiphlogistics had been abandoned; and hoped before long to convince the Society, by a tubular view of cases comprising the bad as well as the good ones, that in hepatic disorders mercury could only be considered as useless or injudicious.

Dr. Angus Macdonald agreed with much that Dr. Bennett had said; but, though he set out in practice a pupil of Dr. Bennett's, with a profound skepticism as to the use of mercury, he found himself, by experience, compelled to use it in many cases, from having seen the advantage of its use.

Dr. George Balfour, in answer to Dr. Bennett, showed that mercury, in acting as a destructive agent on tissue, acted chiefly on new and morbid tissue, and by its destructiveness did good. He also pointed out how large doses of calomel acted as mere irritant purgatives, and were not absorbed, while very small doses were absorbed by the system.

Dr. Stephenson, in reply, stated that, in his opinion, Dr. Bennett had not appreciated the points illustrated by his cases; and that Dr. Bennett did not distinguish between the use and the abuse of a remedy.—*British Medical Journal, March* 25, 1871.—*Nashville Med. Journal.*

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Case of Remarkable Presentation of the Fœtus in Utero.

By Robert Anderson, M. D., L. R. C. S. Edin.

The following case came under my observation on the 25th of May, and presents many remarkable features, it being an instance in which, so far as I am aware, the greatest number of parts of the child presented at one and the same time. I therefore venture to think it may be of interest to the profession.

At 10 P. M., on the 25th of May I was summoned hurriedly to see Mrs. A——, who was in labour with her ninth child. She was being attended by a midwife, who, on finding something abnormal, sent at once for my assistance. She is a woman of very short statue, but with a roomy pelvis. She has had two still-born children previously at the full time, and also two footling presentations, both of which are alive. On my arrival I found she had been in labour since 8 A. M.; but with very light pains. The liquor amnii escaped about 4 P. M., and the pains had almost entirely ceased since then. On attempting to examine per vaginam, I discovered about nine inches of the cord outside the vulva, which I ascertained had existed for two or two hours. It was pulseless. When the finger was introduced into the regina, I found both feet presenting toward the posterior wall of the vagina; and, on sweeping round to feel the extent of dilatation of the os, I found a hand toward the right wall, and one toward the left. There was also a large, soft, bulging mass in the center, which, on first thought, I took for the breech; but, on pressing it, I found it to be some part of the head, with a large caput succedaneum. On finding the os fully dilated, I first endeavored to reduce the prolapsed cord; but failing, I seized both feet, and, bringing them down, delivery was easy. The child, of course, was dead; and all attempts at resuscitation were unavailing. The face of the child was delivered under the pubes, but proved no obstruction. An examination of the fœtus showed a caput succedaneum on the forehead, which was thus proved to have been the part of the head presenting, along with the cord, feet, and hands. The mother has progressed rapidly to recovery, and is now almost quite well.

The above case is to me singular as an instance of no fewer than six parts of the fœtus presenting in the vagina at once—viz., the umbilical cord, both feet, both hands, and the forehead. The face coming under the public arch was to be looked for when the position of the child in utero is considered. It however proving no hindrance to delivery, a very complicated presentation turned out a case of easy management.—*Lancet.*

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Relapsing Fever in Carlisle.

Several of the cases of relapsing fever observed in Carlisle, it would appear, are very characteristic. Persons while engaged at business are suddenly seized with headache, pains in the epigastric region, back, and limbs, with rigors, and with severe vomiting, which obstinately continues for some days. A reaction shortly follows the chief symptoms, there being a hot, dry skin, great thirst, full quick pulse (which soon rises to from 120 to 150 per minute), little or no sleep for two or three days and nights, general restlessness, hurried suppressed breathing, face suffused and expression anxious, some feeling of prostration, impaired appetite, giddiness, and intolerance of light and sound. The skin assumes a bronzed hue, or jaundice may appear. Sweating, at first slight, becomes profuse. The tongue generally continues moist, although a white fur covers it; occasionally, however, a dry brown line runs along the centre. The bowels are confined. The urine is either suppressed or scanty and high-colored; and when allowed to rest for a short time, half or more of the entire volume may consist of deposit. There is enlargement of the liver. Delirium manifests itself during some part of the disease. The eyeballs are affected in some instances. Towards the end of a week from the commencement of the disease, as the symptoms mentioned greatly increase in severity, a crisis ensues; it may be by sweating which saturates the bedclothes around the patient, by a free flow of urine, and by several loose motions of the bowels. To the patient recovery seems so complete that the next day after the crisis he is up, and in the course of three or four days, without the permission of his medical man, may go out for a walk or resume business. At the close of an apyrectic week or so of happiness there is a *relapse* of all the former symptoms. This second attack is milder and of shorter duration than the former. A second apyrectic interval occurs, and a *second relapse*, which may be more grave than the primary attack. Those affected by the disease are the improperly and ill-fed people who live in dirty, crowded, badly ventilated houses.—*Lancet.*

Treatment of Pneumonia.

M. Papillaud terminates an interesting paper published in some recent numbers of the *Gazette Medicale,* on the "Treatment of Pneumonia," with the following conclusions: 1. Bleeding is hurtful in the treatment of malignant or adynamic pneumonia. 2. It is also injurious, whatever may be the form of the pneumonia, in feeble or debilitated subjects. In robust subjects it may be serviceable as an expedient for the relief of the embarrassed respiration, but opium may render the same service without producing the inconveniences consequent on the loss of blood. 3. In the treatment of pneumonia, tartar emetic is a remedy of the first rank, by reason of its antipyretic, antiphlogistic, and decongestive action; but there is no need to raise the dose beyond from 10 to 20 centi-grammes, nor to continue its employment for a longer period than from two to four days. 4. Alcoholic liquids, in doses varying from 30 to 100 grammes according to the subjects, are medical agents which, whether by aiding organic combustion, or from other as yet little known modes of action, powerfully contribute to the resolution of pneumonia. 5. A formula combining these three medicinal agents—opium, antimony, and alcohol—is that which will best meet all the ordinary indications in the treatment of pleuropneumonia.—*Medical and Surgical Journal.*

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Pathology of the Prostate Gland.

Dr. Kraus states it may now be laid down as a rule, admitting of but few exceptions, that all diseases of the prostate take their origin in catarrh of the urethra or bladder. In consequence of the entrance of large quantities of the catarrhal secretion the gland becomes greatly swollen and enlarged, and the entrance of the secretion he attributes to the loss of tone in the bladder, by which the secretion is arrested in the prostatic portion of the urethra, and, subjected to pressure, thus is forced into its ducts. The cavity of the caput gallinaginis also becomes filled with the secretion, and from thence the catarrhal inflammation spreads along the ejaculatory ducts to the vesiculæ and epididymis. In some cases copulative power becomes lost by the agglutination or entire adhesion of the ejaculatory ducts, bloody semen occurs when in hæmorrhagia or vesical catarrh the semen is forcibly expelled through the adherent ducts. Muscular tissue is so prevelent in its texture that the formation of abscess in its substance is a very rare occurrence. Strictures of the urethra from enlargement of the prostate are also of extreme rarity, as the urethra has a large play between the corpora cavernosa, and can exert much locomotion before being interfered with by enlargement of the prostate.—*Med. Times and Gazette.*

Undulatory Hypothesis Applied to Sensation.

In the course of the discussion upon a paper read by Dr. Brown-Sequard, at the late meeting of the British Association, Dr. McDonald, F. R. S., of Dublin, said that he had long felt some difficulty about adopting the hypothesis that there existed distinct conductors for various sensations, as those of heat, pain, tickling, contact, &c. In explanation of the remarkable cases sometimes met with, in which an individual who felt perfectly the contact of one's hand, yet could not distinguish heat or cold, he proposed another. His hypothesic was, in fact, an application of the undulatory hypothesis to the propogation of nervous sensations; he supposed that sensations such as those of heat, pain, contract, as well as those of various colors, or form, of sound, were waves of different wave lengths; and that, under certain circumstances, some waves were absorbed or intercepted, while others passed on to the sensorium. He drew an analogy or illustration of his hypothesis from Prof. Tyndall's well-known experiments on the absorption of radiant heat by vapors or scents passed into the air filling a glass tube. The glass tube in this experiment represented the nerve tubule, the slight change effected in the air contained within it, produced by the introduction of the minutest quantity of scent, causes an absorption *in transitu* of some waves of heat; others pass. The experiment of seeing the complementary color upon gazing at a white ground, after looking upon a colored disc, might be explained thus: A single chemical change is effected in the nerve tubule by gazing at the colored disc; when the white ground is looked upon, all undulations pass through *save* those which are absorbed, viz., those of the color previously looked at. This, of course, gives the complementary color. Many phenomena connected with sensation, Dr. McDonald conceived, would find in this hypothesis a simpler explanation than in that of distinct conductors.—*Chemical Gazette.* —*Baltimore Med. Journal.*

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Fatal Salivation from Bichloride of Mercury.

In a case which is fully reported in the *Lancet* for September 16, Dr. Meeres applied with a small camel's-hair brush a strong alcoholic solution of corrosive sublimate—eighty grains to the ounce—to the head of a child affected with tinea tonsurans. The application gave rise to no pain at the time, but during the ride home, in an open dog-cart, the child suffered severely. Shortly afterwards vomiting and purging came on. Salivation, accompanied by much swelling of the parotid and submaxillary glands, was first observed on the evening of the day after the application, and continued until death took place, apparently from prostration, on the morning of the fifth day.

The verdict of the coroner's jury was "that death was caused by poison from the application of a very strong preparation of bichloride of mercury, made to the head and neck by Dr. Meeres," and that "Dr. Meeres is very greatly to be blamed for having made the application."

The lotion applied was from a formula of Dr. Tilbury Fox, and has been used by him in a precisely similar manner in the same disease in very many instances, and this case is the first in which any untoward symptoms have been produced by it.—*Medical Times.*

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Editorial Department.

Bromide Substituted for Iodide of Potassium.

The following Circular handed us by Mr. W. H. Peabody, we consider worthy of the particular attention of the Profession. The present scarcity of Iodide has advanced the price of all its preparations, and Iodide of Potassium is now more than four times as expensive as the Bromide.

The temptation to unprincipled men to institute the one for the other is therefore great. When this medicine is prescribed and fails to produce its proper effects, we would recommend an immediate examination of the Drug.

PHILADELPHIA, November 3d, 1871.

DEAR SIR:—

We beg to advise you that we have been informed of several parcels of Bromide of Potassium being offered to some of our drug friends as Iodide of Potassium; the strip label of the former having been removed from the bottle, and one for Iodide of Potassium substituted.

As they are very similar in appearance we take the liberty of suggesting the propriety of a close examination of the labels as well as the article itself, should any be offered to you by irresponsible parties, particularly if at prices much below current rates.

For Iodide of Potassium we have the engraving of our Laboratory, and underneath it, but printed on the *same label*, the words Iodide of Potassium, &c.; while for Bromide of Potassium we have, up to this time, used a strip label above and separate from the engraving of the Laboratory. We are about changing our style for Bromide of Potassium, and expect in a short time to have the name of the article on the same label with the representation of the Factory, as for Iodide.

Should there be any doubt as to the purity of the article offered, or to its being the Iodide, the point can be readily determined by employing the Corrosive Sublimate test. This will be found on page 1299 of the U. S. Dispensatory, 12th edition.

Very respectfully,
Your friends,
POWERS & WEIGHTMAN.

Alumni Association of Buffalo.

This Association was formed in February, 1871, with the object of obtaining, and keeping in some suitable form, the addresses and all matters of historic interest concerning the graduates of the Buffalo Medical College. Dr. T. D. Strong, of Westfield, N.Y., was elected President, and Dr. W. W. Miner, Secretary.

In order to fully accomplish the object of the Association, all graduates of the University of Buffalo Medical Department will confer a favor by sending their address and any matters of interest in their histories to the Secretary of the Alumni Association, Dr. W. W. Miner, Office of the Buffalo Medical and Surgical Journal, Buffalo, N. Y.

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Rush Medical College.

We most cheerfully call the attention of our readers to the following appeal for Chicago. We believe it will meet a liberal response from not only the Alumni of the College, but from many others.

CHICAGO, November 1st, 1871.

To Whom it may Concern :

This is to certify, that the resident Alumni of Rush Medical College, of the City of Chicago, at a meeting held at the house of E. Ingals, M.D., on the eve of October 17, 1871, appointed the following Alumni an Executive Committee, to draft and present an appeal to the Alumni and friends of the College, for aid to rebuild and refurnish the College Building, viz.: T. D. Fitch, M.D., Chairman; H. A. Johnson, M.D., V. L. Hurlbut, M.D., C. T. Parkes, M.D., Ben C. Miller, M.D., and F. A. Emmons, M.D.

E. INGALS, M.D., Chairman.
CURTIS T. FENN, M.D., Secretary.

An Appeal to the Alumni and Friends of the Rush Medical College, recently destroyed by fire, for aid to assist in its rebuilding :

This College is among the oldest institutions of learning in the Northwest, having been in operation since 1843, at which time the region now tributary to Chicago was but sparsely populated, and had little wealth. During this time it has supplied a pressing need of this new country. It has educated a large number of young men, who are scattered through our whole country, worthily filling places of great usefulness and responsibility; and for this, both themselves and the public are indebted, in a great measure, to the school in which they received their instruction. A large proportion of its students have been possessed of little, save youth, hope, intelligence, and determination. Many of these, having been generously aided by the College, have taken rank among the most substantial members of the profession. The Faculty at all times, since its organization, has been moved by an earnest desire to promote the best interests of the profession and the College. For this its members have labored faithfully and earnestly; they have met the pecuniary burden of the School from its first foundation, and four years since they erected from their own resources, at an expense of $70,000, the most ample and best appointed college building on this continent, and filled it with every necessary appliance for successful teaching, and the influence and usefulness of the School has steadily increased from year to year. But in a day, the College Building, with all its contents, was swept away, along with a large part of the city, in which it stood a peer among many other noble institutions of learning. The pecuniary loss of the Faculty, in the destruction of the College, is light when weighed against others they have sustained. A number have lost nearly everything, and all have suffered much. The College must be rebuilt. Its past history, its future promise for good, demand no less. Under the circumstances, it is unreasonable to expect the Faculty to do this unaided. The College is now in a condition to justify an appeal to its Alumni, and to society, for some return for the favors it has conferred upon both. There is, perhaps, no field of benevolence, that offers a richer return than to provide adequate and easy opportunities for instruction to those who desire to become learned in the best means for assuaging pain and healing the sick.

All donations may be remitted to Chas. T. Parkes, M.D., Elston Av., Chicago, who has been elected treasurer for the fund. They will be thankfully acknowledged, and faithfully devoted to the rebuilding of the College.

The Trustees of Rush Medical College to its Alumni, Greeting :

The last terrible conflagration which devastated so large and fair a portion of Chicago, swept out of existence nearly all the material part of your Alma Mater. Rush Medical College exists to-day only in its legal organization, the lot on which the College building stood, the energy of its Trustees and Faculty, and the love and fidelity of its Alumni.

The College edifice, so recently and expensively erected, the chemical and physiological laboratories, the museum, and all the appliances of teaching are gone and a sad material ruin replaces them.

The Trustees are, however, cheered and encouraged by the expressions of sympathy and offers of pecuniary assistance which have come to them from many of the Alumni, in different parts of the country. The Alumni of Chicago have appointed a committee, to appeal to their brethren, in behalf of their Alma Mater. This appeal the Trustees most heartily approve and endorse; and while all sums which may be offered will be most thankfully received, they are confident that fortune has smiled upon very many of the sons of "Old Rush," and that among these favored ones, there are generous hearts, which will prompt to munificent donations. To such they make the following offer:

For every donation of five hundred dollars the Trustees will establish a perpetual free scholarship, which shall bear the name of the donor, and which shall be conspicuously emblazoned on the wall of the lecture room. A certificate of this scholarship, engrossed on parchment, will be issued to the donor; which certificate shall secure to the bearer, free tuition, and when found qualified, free graduation. This certificate shall be perpetual in its operation; and thus the donor will have endowed for one student each year a Free Medical College.

WM. B. OGDEN, Chairman.
GRANT GOODRICH, Secretary.

Books Reviewed.

Electrolysis and its Application to the Treatment of Disease. By A. D. Rockwell, A.M., M.D.

In this pamphlet, which is a reprint from the New York Medical Journal, the author expresses a very favorable opinion as to the value of electrolysis in the treatment of many diseases. He says:

> "When we come to inquire concerning the practical results yielded by electrolyzation in its application to tumors and other surgical diseases, the field opened before us is a most encouraging one. A great variety of abnormal growths, nævi and papillary enlargements, sebaceous, hydatid, and erectile tumors, goitres, and even cancers, are reported as having been successfully treated by electrolysis. Our own experience in this department of electro-therapeutics, not yet very extensive, has been on the whole measurably successful."

Contributions to Practical Laryngoscopy. Second series. By A. Ruppaner, A.M., M.D.

This contribution consists of an interesting case describing the removal of a large fibrous polypus, in the larynx, by thyrotomy, preceded by laryngo-tracheotomy. In connection with the clinical history of the case, it contains a colored plate with four figures. Fig. 1 showing the polypus in the larynx as seen in the laryngeal mirror before operation. Fig. 2 the same after removal by thyrotomy, and laid open in the median line, from apex to base. Fig. 3, appearance of the interior of the larynx six weeks after the operation. Fig. 4, appearance of the patient two months after the operation of thyrotomy, and four months after the operation of laryngo-tracheotomy. The canula still worn. The author promises the further observation in regard to it and its final result.

Introductory Lecture to the Course on Pathological Anatomy at the University of Philadelphia. By Joseph G. Richardson, M. D.

In the course of this lecture, Dr. Richardson asserts that a great many pathological changes in the human body are due to hereditary tendencies, and inheritances of microscopical peculiarities. He thinks that, "just as the evolutionist philosopher may claim to have obtained a clue to the mysterious development of organic life, through past ages, upward towards a higher type, in that pregnant phase, 'the survival of the fittest,' so we, as physicians, may discover a universal key to those problems of hereditary disease among which our life-work is cast, in its anthithesis, the funeral fiat which decrees for individuals, families, and races, alike, *the extinction of the unfit.*"

The First Annual Report of the Board of Directors of the Free Medical and Surgical Dispensing Association of Buffalo.

The Report contains the organization and names of the officers, which is supplemented by the Report of the President, containing an account of the objects of the Association and the results to be expected from it.

The expenses of the Association were mainly met by an appropriation of two thousand dollars by the Board of Supervisors of Erie County, this, we infer, being supposed to be the most economical method of caring for the city poor. If it should prove to be the most satisfactory both to the county, the poor and the members of the profession who engage in it, then certainly the plan should be continued and hearty encouragement given it. It will remove the care of the poor from party favoritism, and test the general question, whether the sick can be better cared for by the profession gratuitously, than for very small pay. We rather like the plan as a tax-payer, and only wish its "benevolence"? might be extended to include Poor House, Jail, Penitentiary, and Coroner's accounts. The energy and faithfulness of the profession, in its first years' labor in the Association, merits unqualified admiration.

Practical Therapeutics. By Edward John Warring, M. D., F. L. S. Second American, from the Third London Edition. Philadelphia: Lindsay & Blakeston, 1871.

The appearance of a Second Edition of this work upon Therapeutics at once attracted our attention as likely to have undergone modification, and to contain considerable material not hitherto incorporated in any standard work. Glancing at the preface, we find in the author's own words, the changes and the omissions, which have been made. He says:

> " In common with all other branches of knowledge, Therapeutics has within the last few years, made rapid strides, and the facts brought to light have been of a very diversified and important character. A notice of these in the following pages was manifestly indispensable, but to have engrafted them *en masse* on the matter contained in the previous editions was considered unadvisable, as by so doing the size of the volume would have been greatly increased without any commensurate benefit. Such a course, indeed, would have been attended with positive disadvantage, as the results of modern inquiry have tended in many instances to modify or overthrow views previously entertained; so that, in addition to increased bulk, itself objectionable, the volume would have presented in juxtaposition statements and counter-statements which could not well have failed to have been a source of considerable embarrassment to the stndent and young practitioner.
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> Under these circumstances it appeared expedient to rewrite the work, which has accordingly been done to a great extent, and several modifications have been introduced; some of the articles, *e, g.*, Antimony, Calomel, and Blood-letting, have been considerably abridged, several unofficinal articles of minor importance have been omitted altogether, the farmulæ have been arranged in a more condensed form, the foot-note references have been diminished in number or incorporated with the text, and by the introduction of more numerous synonyms in the body of the work the necessity for the Index of Medicines, extending over fourteen pages, has been obviated. By these means space has been rendered available for new matter, and advantage has been taken of it to introduce notices of Chloral, Bromide of Mercury, Iodide of Methyl, Bichloride of Methylene, Protoxide of Nitrogen, Sandalwood Oil, Apomorphia, and other new remedies, together with extended notices of other medicines, which, though not strictly new, have acquired increased importance from their claims as therapeutic agents, having only of late years been fully recognized; such, for example, as Bromide of Potassium, Calabar Bean, Carbolic and Sulphurous Acids, Permanganate of Potash, and the Alkaline Hypophosphites and Hyposulphites. In Part II space has been found for articles on the Hypodermic and Endermine methods of treatment, and to the article Antidotes has been appended a brief sketch of the most approved methods of treatment in cases of poisoning.
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> Notwithstanding these and other additions, this Edition, as compared with the last, shows a decrease in the number of pages, but it is confidently believed that though reduced in bulk it will not be found to have lost any portion of its practical utility, the object invariably aimed at throughout the compilation of the following pages."

In watching the progress or change in therapeutics, we are struck with wonder and admiration—wonder at the rapid change that is constantly taking place as to the value of medicinal substances, and admiration for the honesty and liberality of men in so readily and thoroughly correcting their previous opinions when convinced that they were wrong. Looking over the Chapter on Calomel, which formerly required many pages to detail the diseases in which it was essential as a curative agent we find the same space is now required to speak of the diseases in which it was formerly employed, but is now wholly abandoned. The same of Antimony, Bleeding, Leeching, Cupping, Blistering, &c., &c., remedies so long in vogue by at least all Englishmen.

This work in its present edition is a positive contribution to our standard therapeutics, and we most earnestly recommend it to the perusal of all who have held to former opinions, reluctantly changing their views, to correspond with the more careful observations which have established the therapeutics of the present time.

Prolapsus Uteri; its chief causes and Treatment. By Thomas Addis Emmett, M.D.

This is a very valuable paper, and is worthy careful perusal by the profession. The chief causes are grouped under four heads, it may result from one of these, or several combined. "First, the uterus may be crowded down into the pelvis from abnormal pressure above, by the weight of some extraneous development in the cavity, from habitual constipation, tight lacing, &c. Second, the prolapse resulting from increased size of the organ, from imperfect involution, obstructed circulation in the organ itself, or elsewhere, from pathological changes of its tissues, the effect of inflammation, or from the development of tumors intimately connected. Third, after parturition, the vagina may remain dilated with a loss of tone in part or throughout the canal. Fourth, from laceration of the perineum, we find rectocele and cystocele resulting, and with the prolapsing vaginal walls, detect the descending uterus at various points, from a slight displacement to complete procidentia." For treatment he recommends restoration of the health of the patient to a certain standard before instituting the local treatment. For the latter he advises large hot-water injections, a pint or two at 98° or 100° F, thrown into the vagina This he has practiced for the past nine years and has found it very efficacious. Other plans of treatment are mentioned. Cases which cannot be treated in any other way, are selected for surgical interference.

The Management of Infancy Physiological and Moral; intended chiefly for the use of parents. By Andrew Combe, M.D. New York: D. Appleton & Co, 1871.

This is a popular well written and forcible presentation of the claims of young humanity upon the more enlightened portion of mankind. It shows how defective has been the moral and physical care of infancy, and by what steps it has been, and is being, raised to a more enlightened and humane standard. The work claims the attention of all true lovers of humanity, either in its early stages or more advanced periods.

Retrospect of Uterine Pathology and Therapeutics in the United States. By Henry Miller, M.D.

This paper treats specially of intra-uterine medication in chronic Internal metritis. The author claims to have been the first to introduce in this country intra-uterine medication. He gives a brief notice of medical books and journals which contained notices of endometritis and its medication since 1855.

The Anatomical Remembrancer, or Complete Pocket Anatomist. By C. E. Isaacs, M.D. New York: William Wood & Co., 1871.

This little work contains a concise description of the structures of the human body. It has passed its third edition, with such corrections and additions by the author, as are most essential to the medical student in his perusal of practical anatomy. As a guide in the teachings of the lecture room, it is unequalled. The book has a very neat appearance, and we recommend it to the student as a very useful companion.

Handy-Book of the Treatment of Women's and Children's Diseases, according to the Vienna Medical School, with Prescriptions. By Emil Dillnberger. Translated by Patrick Nicol, M.B. Philadelphia: Lindsay & Blakston, 1871.

The names of the various maladies of women and children are given in this work, with the briefest notice of their character. To this is added the longest and most complete set of formulas, and lists of medicines applicable to all stages and forms of the disease. It is truly the Vienna School of Medication, and wholly unsafe in the hands of young American physicians.

Essentials of the Principals and Practice of Medicine. A Handbook for Students and Practitioners. By Henry Hartshorne, A. M., M. D. Third Edition, thoroughly revised. Philadelphia, Henry C. Lea, 1871.

The Third Edition of this work comes to us in a very neat, and pleasing form, comprising some four hundred pages of valuable and interesting information. In the preface to the Third Edition, Prof. Hartshorne says, "Great pains have been taken by the author, in prepairing the third edition of the "Essentials," to supply omissions, and to add whatever has seemed to be most positive and important in the recent advances of medical science. Such additions, however, although numerous, are conveyed in brief language, so as not to increase materially the size of the volume."

The general plan of the work is excellent, each subject being taken up and discussed in a liberal manner, although necessarily condensed in a work of this kind. We can heartily recommend it to both Students and Practitioners. It is a valuable companion to the student while attending lectures, and an aid to the young practitioner in the general treatment of disease.

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Notice.

There will be a Competitive Examination for resident Physician to the Buffalo General Hospital, on the 1st February, 1872; to date from March 1st, 1872. Applicants are to send their names to Dr. J. N. Brown, Secretary of Staff, No. 115 Franklin Street, when they will be notified of the time and place of examination.

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Detroit Medical College.

The following resolution of the Faculty of the Detroit Medical College removes one of the objections which have been urged against Spring College

Sessions, "That by this means students were enabled to obtain all their College instruction and to graduate within the short period of a few months."

REQUIREMENTS FOR GRADUATION.

"Diplomas will be conferred only once a year, at the close of the regular term.

Evidences of having studied medicine during a period of three years, and attended at least two courses of lectures, of which the last must have been in this institution, will be required of every candidate for graduation. *No student, however, will be received into the graduating class whose first course of lectures has been completed within six months of the beginning of the term.* This rule has been found necessary in order to prevent students from completing their whole college attendance in one year, a practice, the evils of which are too apparent to require discussion This rule will be rigidly adhered to under all circumstances."

New York Observer.

The year 1872 will be jubilee year to the *New York Observer*, which was established in the beginning of 1823. This paper is one of the most influential in the country; and has acquired its influence by a rigid adherence to, and a fearless advocacy of, sound principles in Church and State. It has both a Religious and a Secular Department, kept distinct; and although not political or partisan in its character, it freely expresses and ably defends its views on matters of public policy. It has been for almost half a century a light in the Church and a pillar in the State. It will celebrate its jubilee by presenting to each one of its subscribers a NEW YEAR-BOOK—an encyclopædia of the most valuable information in regard to all those matters in the Church and in civil life which every one desires to have constantly at hand. New subscribers will receive the paper free until January 1st.

Books and Pamphlets Received.

Descriptive Catalogue of Medical Works. D. Appleton & Co., 1871.

Remarks on Wines and Alcohol, by Charles A. Lee, M.D.

The prevention of Abscesses in Hypodermic Medication, by Reuben A. Vance, M.D., 1871.

List of the Library Series, commenced by Mr. Henry G. Bohn, now in course of publication by Messrs. Bell & Daldy, London, England.

Clinical Examination of Urine, by Reuben A. Vance, M.D.

The Clinical Thermometer, by Z. C. McElroy, M.D, Zanesville, O.

A contribution to the treatment of the Versions and Flexions of the Unimpregnated Uterus, by Ephraim Cutter, A.M., M.D.

A practical treatise on Fractures and Dislocations, by Frank Hastings Hamilton, A.M., M.D., L.L.D. Fourth edition, revised and improved. Illustrated with three hundred and twenty-two wood cuts. Philadelphia: Henry C. Lea, 1871. Buffalo: Theo. Butler & Son.

Headaches: Their causes and their cure, by Henry G. Wright, M.D. From the fourth London edition. Philadelphia: Lindsay & Blakison, 1871. Buffalo: Theo. Butler & Son.

Restorative Medicine. An Harveian Annual Oration, delivered at the Royal College of Physicians, London, by Thomas King Chambers, M.D., with two sequels. Philadelphia: Henry C. Lee, 1871. Buffalo: Theo. Butler & Son.

The Functions and Disorders of the Reproductive Organs in Childhood, Youth, Adult Age, and advanced Life, considered in their Physiological, Social, and Moral relations, by William Acton, M.R.C.S. Third American edition from the fifth London edition. Philadelphia: Lindsay & Blakiston, 1871. Buffalo: Theo. Butler & Son.

The Druggists General Receipt Book. Comprising a copious Veterinary Formulary; with numerous recipes in patent and proprietary medicines, druggists nostrums, &c.; perfumery and cosmetics; beverages, distetic articles, and condiments; trade chemicals, scientific processes, and an appendix of useful tables, by Henry Beasley. Seventh American, from the last London edition. Philadelphia: Lindsay & Blakiston, 1871. Buffalo: All booksellers.

The Physician's Visiting List for 1872. Philadelphia: Lindsay & Blakiston. Sold by all booksellers and druggists.

On some Disorders of the Nervous System in Childhood. Being the Lumeian Lectures delivered at the Royal College of Physicians of London, by Charles West, M.D Philadelphia: Henry C. Lea, 1871. Buffalo: Theo. Butler & Son.

The Physician's Dose and Symptom Book, containing the Doses and Uses of all the principal articles of the Materia Medica and Officinal Preparations, &c, by Joseph H. Wythes, A.M., M.D. Tenth edition. Philadelphia: Lindsay & Blakiston, 1871. Buffalo: Breed, Lent & Co.

Emergencies and How to Treat them. The Etiology, Pathology, and treatment of the Accidents, Diseases and cases of Poisoning, which demand prompt action. Designed for Students and Practitioners of Medicine, by Joseph W. Howe, M.D. New York: D. Appleton & Co., 1871. Buffalo: Breed, Lent & Co.

Atlantic Monthly, Little's Living Age, Advance, N. Y. Observer, Peterson's Musical Monthly.

A Text-book of Pathological History: An introduction to the study of Pathological Anatomy, by Dr. Edward Rindflish. Translated from the second German edition with permission of the author, by William C. Kloman, M.D., assisted by F. T. Miles, M.D., with two hundred and eight illustrations. Philadelphia: Lindsay & Blakiston, 1871.

Eating and Drinking; A popular manual of food and diet in health and disease, by George M. Beard, M.D. New York: G. P. Putnam & Sons, 1871.

Hand-Book of Skin Diseases, by Dr. Isidor Neumann. Translated from the second German edition, with notes, by Lucius D. Bulkley, A.M., M.D. Illustrated with sixty-six wood-cuts. New York: D. Appleton & Co., 1872. Buffalo: Breed, Lent & Co.

BUFFALO
Medical and Surgical Journal.

VOL. XI. DECEMBER, 1871. No. 5.

Original Communications.

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ART. I.—*The Intraocular Serous Membrane and the Nature of Glaucoma. By Dr. A. Sichel, Jr.*

Translated from the *Annales d'Oculistique*, BY F. W. ABBOTT, M. D., Ophthalmologist to the Buffalo Free Dispensary.

There are unquestionably, few subjects in the domain of Ophthalmology which have given rise to so many writings of a contradictory nature as Glaucoma. He would doubtless be accused of temerity, who should attempt to raise a corner of the veil with which this question has, for a long time, been enveloped, since this veil has been shown to be almost impenetrable to the most illustrious masters, as Donders, Arlt, and above all Von Graefe. Nevertheless, a recent discovery, and one which appears to me to be of great importance for the theory of Glaucoma, has induced me to write the following pages, which, if they do not definitely decide the question, will at least make the readers of the *Annales d'Oculistique*, acquainted with an interesting and conscientious article, which from the special nature of the publication in which it appeared, is, perhaps, not at the disposition of all.

But, before entering into the heart of our subject, permit us, without wishing to give here the history of this question, so well known to all, especially since the excellent thesis of Dr. Hauffmanns, to recall the principal phases which the study of glaucoma has undergone; an examination which perhaps will not be devoid of interest.

From all time the obscurity of the developement and the insidious character of this disease, the inefficiency of medical treatment, and finally the absence of lesions clearly appreciable and determinable by "macroscopic" examination, which alone the ancient masters possessed, have successively excited to a high degree the interest of its observers; but we are compelled to see, that, in spite of the most praise-worthy efforts all have encountered the same obstacles, and no one of them has succeeded in furnishing a clear and plausible explanation of the phenomena observed during life. Although the methods of examination during life, as well as after death, were suddenly perfected in an unhoped for manner, there persisted none the less a great obscurity around this subject; and in spite of the most ingenious hypotheses, or the most senseless theories, and perhaps even on account of these latter, a clear and precise interpretation of the phenomena, based upon palpable facts, remained for a long time in the condition of an ardently coveted desideratum.

The reader will excuse us from recuring to the most remote epoch of the knowledge of glaucoma. It appears in truth to have been known from all antiquity although it appears to have been often confounded with certain forms of cataract. It is sufficient for us, for the end which we propose to attain, to recur to the commencement of this century, the epoch when Ophthalmology commenced its truly scientific era.

Beer considered glaucoma, as a consequence of an arthritic vice, and it is not difficult to recognize in that which he describes under the name of arthritic ophthalmia, that which we to-day call acute glaucoma. Moreover the description which he gives of glaucoma in classing it among arthritic diseases, proves clearly the sagacity of his observant spirit, but teaches us nothing as to the nature of the affection.

To Weller is due the first categorical description of the disease which occupies us. He is the first one who speaks of the vision of colored circles around lights, and of the hardness of the globe. But we see, nevertheless that the pathogeny leaves much to be desired, for he adheres to the opinion of Beer, and believes that he is able to affirm that the true seat of the disease is partly in a trouble of the vitreous humour, which according to his dissections, was of a light greenish brown, but above all in the retina whose color was altered and which was for him the essential seat of the disease. He rests, to confirm his dictum, upon the opinion of Wenzel, whose words he cites: "That which is called glaucoma," says Wenzel, "appears to me to be a true affection of the optic nerve, the alteration of which communicates itself to the retina which is the expansion of it."

As to its pathogeny the first clear idea which we encounter is in the work of Mackenzie, who calls particular attention to the hardness of the globe, which he ascribes to a change of consistence of the media of the eye, and which appears to him to be due to an *accumulation of liquid* in the interior of the globe.

A little after, appeared the celebrated work of my father, in which, taking numerous anatomical researches as a basis, he considers glaucoma as the result of an arthritic choroiditis. This opinion very soon made many partisans, notably Arlt and Schroeder Vander Kolk, and later still Lawrence, who consider the disease as a consequence of alterations of the choroid and consecutively of the retina.

From this time many years elapse without the appearance of notable works upon this subject. Nevertheless Stellwag von Carion remarks that besides the choroiditis there exists in glaucoma other alterations, and that the eye may present troubles more or less marked for a long time before it is possible to recognize the presence of a choroiditis. He even goes so far as to state that far from being always the cause of the trouble, the choroiditis is often only the consequence of it.

With him terminates the ante-ophtholmoscopic period. Up to this point all the authors which we have just cited have based their opinion upon the phenomena observed by the naked eye during life, or upon the result of dissections and anatomical observations made without the assistance of the microscope.

Ed. de Jaeger is at the head of the second period. To him is due the first ophthalmoscopic design of an arthritic (glaucomatous) amaurosis, but the changes which the optic papilla has undergone are ascribed by him to a swollen condition of the nervous disc; and we find no indication of the pathogeny of the disease.

It was then that the first work of Von Graefe appeared, in which he both describes the change of form of the optic disc, its *convex* aspect and pointed out for the first time another extremely important sign, viz:, the spontaneous pulsation of the central artery. He observed upon this subject that he had noticed this phenomena in no other affection of the fundus of the eye, and *that he considered it of extreme importance for interpreting the nature of the malady.*

A little after he published a second article, in which he said that the optic disc is not *swollen*, but rather *excavated*, that is to say in place of being *convex* it is *concave.* These two phenomena, the excavation of the disc, and the spontaneous pulsation of the central artery appear to him calculated to lead us to think that the disease is caused by an *exaggeration of the intraocular pressure*, and to the support of this hypothesis he cites some slight ameliorations obtained by the *repeated evacuation of the aqueous humor*, (paracenteses).

Very soon after appeared his third and immortal work upon the cure of glaucoma by iridectomy, a work in which he still seeks to show that the real cause of the trouble is the exaggeration of the intraocular tension, which he does not hesitate to attribute to a *serous hypersecretion* due to an *inflammatory alteration of the uveal tract.*

Some time after appeared the very interesting thesis of Hauffmann's, in which are given the ideas of Prof. Donders, who attributes the development of glaucoma to the exaggeration of the intraocular tension, produced by a serous hypersecretion, which the celebrated Professor of Utrecht attributes to a *neurosis of the secretary ciliary nerves.*

The doctrine of the augmentation of the intraocular pressure, being advanced by such authors, naturally had great success. It was almost universally accepted by all ophthalmologists, with this difference, however, that some hold to the opinion of Von Graefe, others to that of Donders. Nevertheless these opinions, which referred the cause of glaucoma to an intraocular hypersecretion of liquid, were only hypotheses when some extremely important facts became known.

In the month of January, 1867, during my last sojourn at Berlin, there came to Von Graefe an officer of the Russian army suffering from the prodromata of glaucoma, noticably characterized by the presence in the right eye of vision of colored circles around lights. Warned by the professor of the gravity of the affection from which he was suffering, this officer submitted himself the very next day to an iridectomy. The evening after this operation, upon leaving the clinic to return home, Von Graefe and myself entered a carriage. The weather was very cold, 12° Reaumur, and the professor, whose respiratory organs were, alas, very susceptible, had caused the carriage windows to be carefully closed. These were very soon covered with a thick mist. All at once in looking mechanically through one of the windows at a lighted street lamp, Von Graefe observed that the presence of the mist on this glass caused, around the flame of the gas, the presence of a veritable halo, presenting all the colors of the spectrum, the violet occupying the parts nearest the flame, and the red the peripheral parts. This observation was a veritable illumination to him. He attracted my attention to the phenomenon, we confirmed it by several repetitions, and he told me that he thought that the colored circles which glaucomartous patients see might, very likely, be of the same nature He immediately communicated to me his intention, so soon as the condition of the patient would permit, to make him observe the phenomenon. Some days later, when the patient was fully convelascent and his condition permitted him to brave the rigors of the temperature, Von Graefe, under a trivial pretext, asked him to ride with us. All at once and without his having seen it before, Von Graefe called the attention of the officer to one of the gas burners which we met on our way, immediately the patient cried out: "*Good heavens, Doctor, I am attacked again with my disease. I see again the same rain-bows, not only with the eye operated on, but also with the other.*" Von Graefe and myself were immediately seized with a hilarity, which the poor patient couldn't comprehend, but of which he quickly knew the cause when, after having wiped the window, Von Grafe made him notice that the alarming phenomenon immediately disappeared, and reappeared on the contrary when the patient looked through the other window still covered with mist. This experiment clearly proved the presence, in the eye of the glaucomatous, of a product, analagous to the vapor of water, which disappears after an iridectomy.

I know not how it happened that Von Graefe never published this very interesting observation, which, nevertheless, afforded so signal a confirmation to the hypothesis uttered by himself.

Affairs were thus, when there appeared at the commencement of the first number of the sixth volume of the *Archiv fur Mikroskopische Anatomie* of Max Schultze (Bonn, 1870, Max Cohen & Son,) a very interesting article from G. Shwalbe to which we have already made allusion at the commencement of this work.

In reading this article it appeared to me that it ought to bring about a veritable revolution in the study and knowledge of the question which occupies us, and I ask the permission of the readers of the *Annals* to give them a succinct analysis of the part which especially touches our subject. In commencing, the author announces that in the present work he will only speak of the lymphatic vessels of the posterior segment of the eye, waiting until another number to speak of those of the anterior. The ciliary body forms, according to him, the limit between these two segments. To the posterior segment pertain the lymphatic vessels of the retina, the perichoroid space and finally of the tract situated between the internal and external sheath of the optic nerve, which, without communicating with the two proceeding, inosculate in the arachnoid space.

As to the lymphatics of the anterior segment, without giving details of their position, the author merely shows that they form a system completely separate from the preceding, and reserves the description of them in detail for his next work.

After this short preamble the author enters upon the exposition of his subject by the study of the supra choroid tissue If we try to separate the vascular membrane of the eye from sclerotic, we perceive at once that these two membranes are intimately united at only two points; about the entrance of the optic nerve and in the neighborhood of the border of the cornea. In all the rest of their extent, these two membranes separate easily, not taking account, be it understood, of the vascular and nervous branchlets which it is necessary to cut. These membranes once separated, we notice that their surfaces, which are in opposition, *have the shine and smoothness of serous membranes.* Moreover, in man and in certain animals we see that there exists sometimes on the internal face of the choroid, after their separation, a floculent tissue, very rich in pigment which united these two membranes the one to the other. This is the tissue which is generally designated now under the name of "supra choroid membrane," and which is considered as a separate layer from the choroid, properly so called. This membrane is, in fact, very sharply distinguished from the choroid by its peculiar tissue, as well as by the appearance of its pigmentary cells, and also by the absence of all blood vessels. As for the so-called *lamina fusca* of the choroid, it is only the portion of the supra choroid membrane which remains adherent to the sclerotic after the separation.

This shining and polished appearance of the internal face of the sclerotic and the external face of the choroid did not escape the ancient anatomists, and Arnold expressed the opinion that the space comprised between the sclerotic and choroid was a true *lymphatic sac*, and that consequently there existed a veritable *intraocular arachnoid membrane.* We will see farther on the justness of Arnold's opinion. Nevertheless, he failed to show that the intimate texture of this intraocular arachnoid coincided with that of the serous membranes. But this proof was impossible by the methods of examination then in use. It was not astonishing, then, that Bruche himself should deny the existence of this intraocular serous membrane in spite of his knowledge of the microscope, because at this time even they had not at their command the present methods examination. Since then the opinion of Arnold has fallen into oblivion.

But by the aid of histological methods in use to-day, it is not difficult to prove that the walls of the space comprised between the sclerotic and the choroid are very analogous to serous membranes. They show, however, the greatest analogy to lymphatic sacs. To prove the justness of this comparison it suffices to show this cavity is lined with a continuous endothelium.*

It is by using the method of preparation in nitrate of silver, invented by Professor Von Recklinghausen, that the author has been able to make apparent the endothelium which lines the walls of the perichoroid sac. For this he made his first preparations of the eyes of white rabbits, whose lack of pigment renders the silver images much more clear and consequently more apparent. Soon after he repeated the same preparations in the eyes of other animals, and finally in the human eye. It is easy to isolate the endothelium of the supra choroid membrane itself. We do this the most easily with pieces which have remained for some time in the solution of Muller. After placing them for some minutes in a solution of ½ to ¾ per cent. of nitrate of silver, we obtain preparations which show a network of straight lines inosculating in such a manner as to circumscribe polygonal meshes. Some nuclei with a bi-convex surface, and ellipsoidal contour are distributed here and there in this network. Some of these nuclei are even provided with nucleoli. These nuclei and meshes are sometimes identical with those of the endotheliums of the lymphatic sacs of the frog, sometimes with those which are found on the internal face of the lymphatic vessels of the intestinal canal.

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*A name given by His to that variety of epithelium which lines serous cavities.

The supra choroid membrane, which does not exist during the embryonic period, is scarcely apparent in the new born or in the first periods of life. It becomes more and more apparent with age, which the author attributes to the repeated movements which the choroid makes to obey the wants of the accommodation for near vision. The repeated tractions have a notable influence upon the ulterior developement of the membrane, and ought to bring about this result, that with the progressive development, the choroid would glide more and more easily upon the sclerotic, and that the free spaces existing between the sclerotic and the choroid should increase.

When we have succeeded in isolating this endothelium,and it does not form folds, it is sometimes difficult to perceieve it, it is only by the presence of nuclei that the attention is found to be drawn to it. These nuclei are also sometimes very difficult to recognize, but coloring them with carmine or iodine may yield precious results. In the points where folds are found, we easily perceive that the membrane itself has a scarcely perceptible thickness. It is only in the vicinity of the nuclei that it has more, thence it gradually diminishes. Hence the whole membrane is found to be composed of thicker and thinner portions. The thickest are always found in the vicinity of the nuclei and the thinnest in the middle of the space between two nuclei. In general the nuclei are widely scattered. Nevertheless several ofthem are often found collected into a group as is observed in other serous sacs as the peritoneum. From a chemical point of view this endothelium is very resisting against acetic acid and the solutions of potash. The nuclei become scarcely more visible from acetic acid, but they swell noticably under the influence of the solutions of potash. These are exactly the same reactions as those which, according to Eberth, the endotheliums of the lymphatic sacs of the frog present.

"From all this, it would be necessary to consider these fine vitreous membranes as an endothelium whose cells are intimately united by their borders, and the protoplasm of which is transformed during the course of their development into elastic tissue. Now that we know of the endothelium of the supra choroid membrane, the intimate texture of the elastic lamellae becomes very clear to us. Each one of them is covered upon its free surface by an endothelium and they enclose between their surfaces a network of elastic fibres and of pigment cells."

In reading this part of this beautiful work, so clear and limpid in statement, and of which only a very feeble analysis has been seen here, numerous reflections came to my mind.

In truth, said I, from the instant in which it is demonstrated that there exists in the eye a serous membrane, it is not astonishing that, as is the case with the other membranes of the same order, there may, in certain conditions, be produced a hypersecretion of liquid, as it happens with the peurae, the peritoneum and the synovial membranes of the articulations.

Finally all the phenomena with which the glaucomatous are tormented, whatever they may be, are consequently explained in a clear and precise manner.

What a brilliant consecration did the theory of Von Graefe receive from this! Was it not a new proot of the sagacity and rectitude of his judgment? Did not his genius anticipate the microscope? Of all the pathogenic phenomena nothing even to the very seat of the secretion escaped him, and he was entirely correct in classing glaucoma among serous choroidites. What matters it, in truth, from the clinical point of view, whether the secretion proceeds from such an such a point of the choroid, if it remains true that this membrane furnishes it, and that its accumulation, in the interior of the globe, provokes the exaggeration of the intraocular pressure?

But since, in a question of so great importance, it is necessary to accept no new statement without submitting it to a rigorous examination and to a careful confronting with the clinical facts, it will be necessary, first of all, to see if all the symptoms of the different forms of glaucoma, as well as the diverse premonitory signs of the disease, find their explanation in the discovery of Schwalbe.

Finally another question of extreme importance, that of the mode of action of an iridectomy, may it not be explained in a satisfactory manner?

I commenced reflecting on these different questions. But at the outset, an important premonitory sign, the rapidly progressing presbyopia, which appeared to me incompatible with this theory, delayed my conviction. Nevertheless I finally found the key of the phenomenon, and immediately as a result of this, for myself, a conviction so firm and complete, that I now have only one desire,to make my confreres partake of this conviction, to render a just testimony to my illustrious and regretted master, and, finally, to put a stop, if possible, to the systematic opposition which is made to his doctrine by envious competitors or jealous' rivals.

This is that which I am now about to attempt.

PREMONITORY PERIOD OF GLAUCOMA.

1. The first and most important prodroma, the presence of colored circles around artificial lights, appeared to us to be explained conclusively by the history which we have narrated of the Russian officer whom Von Graefe took into his carriage. It is evident that it is to the serous hypersecretion that we must attribute it, and the intraocular liquid fulfills for the glaucomatous the same role which the moisture collected on the glass fulfills for us.

2. The sudden and rapidly increasing *presbyopia*, another important prodroma appears at first, as I have said before, not to accord with this theory. In truth the choroid, *pushed back* in every part by the liquor, ought to be abnormally stretched, and consequently we should rather find *myopia*, from the increase of the curvature of the posterior face of the crystaline lens. But let us remember that it is generally at night during sleep, when the *accommodation is relaxed*, that the prodromata commence. It is usually upon their awakening that patients perceive that changes have occurred in their vision. If, then, the choroid is found at

this time to be compressed or crowded back, it is not at all astonishing that the accommodation should be partially paralyzed. Moreover we must not forget that muscular fibres have been found in the very tissue of the choroid, whose contractility is certainly trammeled by the compression. There are also some fibres of the muscle of Bruche. Finally the innervation of this muscle must be much obstructed by the direct compression of the ciliary nerves, whether it proceeds from the direct action of the liquid, or, on the contrary, they are strangled in the sclerotic as they pass through it to penetrate the globe. We see, then, that even here the explanation is perfectly satisfactory. The proofs are even, so to speak, superabundant, and we do not see that anything else than the receding of the vision could be produced in this case.

3. *The diminution of the area of the field of vision* is explained by the compression of the retina, whose *ora serrata*, its most delicate and thinnest part, must manifest the first effects.

4. *The spontaneous pulsations of the central artery* were explained by Von Graefe* in a remarkable manner which becomes still more authorative by the verification of his theory, the proof of the possibility of hypersecretion. It is useless then to dwell longer on it here, and I am contented with referring to the memoir of Von Graefe.

5. Finally, the slight and transitory troubles of the vision are sufficiently explained by a slight effusion of liquid, which, at first, only causes phenomena analagous to those which we produce in our own eyes by slightly pressing them circularly with several fingers or with a ring.

Let us pass now to the examination of glaucoma itself.

1. *Acute glaucoma* at the start would be nothing else than the periodical effusion followed by the complete absorption, more or less rapid, of a variable quantity of serous liquid which, occasioning at first, a traction of the ciliary nerves, would induce the neuralgic pains in the whole of the fifth pair, and principally in the ophthalmic branch of Willis. To this traction would very soon succeed compression of the ciliary nerves, having for consequences anesthesia of the cornea and paresis of the iris. With the maximum

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*Archiv f. Ophth., vol. 1, No. 2, p. 299 et seq.

of the effusion would coincide the abolition of the sight, whose reestablishment is owing to the reabsorption of the liquid.

2. *Chronic inflammatory glaucoma* would be caused by the sudden effusion of a considerable quantity of liquid, not followed by its complete reabsorption, and characterized on the contrary by successive effusions, occasioning alternations of clearing up and obscuring of the sight. Here is immediate compression more or less energetic of the internal membranes, particularly of the retina, enduring for a variable time, and at greater or smaller intervals, and finally destruction of the elements of perception, the optic fibres and nerve cells. Hence, also, the development of the excuvation of the optic disc by pressing out the substance of the nerve.

3. As it regards simple chronic glaucoma, a type essentially chronic, it is caused by the slow and continuous secretion of this same superabundant liquid, and the very slowness of the effusion will explain perfectly the absence or the feebleness of the pains, the slight obscurations of vision and the lack of trouble of the refracting media, a trouble whose presence, on the contrary, would be easily explained in acute and chronic inflammatory glaucoma.

4. As for *glaucoma fulminans* we must refer it to the sudden and immediate effusion of the greatest possible quantity of liquid, which would at once cause such a forcible compression of the retinal and nervous elements, that they would be immediately paralyzed, so that, the effusion being at length absorbed, as it ordinarily happens, the sight would none the less remain abolished for ever and without remedy.

5. We have also in this the key to a phenomenon, which has been inexplicable up to the present time, the frequency of consecutive glaucoma after a crowd of ocular affections, in which this complication has not been explained heretofore, except by the aid of more or less contestable theories.

6. Finally, and this is the most important point, it appears to me that we have from this standpoint, as we said above, a very plausible explanation of the of therapeutic action of an iridictomy, which we may henceforth compare in every particular with that of a thoracentisis in pleuritic effusions and in general with that of the puncture or evacuation of all effusions in serous cavities.

In fact we know that if iridictomy gives brilliant results in acute glaucoma, and if the cure of this form of the disease is lasting by the means in question, it is not the same in chronic glaucoma, simple or inflammatory. In truth, the cases of this kind in which we are obliged to have recourse to a second iridictomy are numerous, and the therapeutic action of the operation has for a long time been recognized as problematical to such a degree, that its insufficiency has evoked from Coccius the proposition to substitute for simple iridectomy in chronic glaucoma, the imprisoning between the lips of the wound of a portion of the iris, this maneuver having appeared to this author to give much more favorable results.* We must remember, also, how frequent it is to observe a delay in cicatrisation of the sclero-corneal wound or cystoid cicatrisations following an iridectomy in chronic glaucoma.

This gave rise to a very interesting discussion in the Society of Heidelberg in 1869. Von Graefe has called attention anew to these facts in his last and admirable work on glaucoma, which was, if we may be allowed the expression his song of the swan. The readers of the *Annals* having had the good fortune of a complete translation of this *chef d'œuvre* of the master,† we must be contented with referring to it, remarking only that all the remarks which he makes upon the subject which occupies us, accord wonderfully with the actual anatomy.

Let it suffice, in closing, to say that in our view the action of the iridectomy consists only in the evacuation of the effused liquid, and that its action is in all things analagous to that of thoracentesis. Consequently the operation has by so much the greater value as it is done at a time nearer the commencement of the disease, as the sclero-corneal incision is made at a point nearest the extreme limit of the interior chamber, as the section of iris removed is greater, and as this incision is carried to a point adjacent to the ciliary attachment of the iris. And if Coccius has discovered that the enslaving of a portion of the iris in the wound gives more satisfactory results than simple iridectomy in chronic glaucoma, it comes from this, that the portion of the iris enslaved acts the part of a tent, which favors the running out of the liquid by capillary attraction or by sponginess.*

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*We ought to remark here that this author has since then renounced this practice, having found that the end was not always attained and that the contrary sometimes happened.

†*Annales d Oculistique*, vol., LXIII, p. 39, et seq.

A last word still in conclusion. If, as we hope, the preceding lines chance to fix definitely the opinion as regards the nature of glaucoma, we will not claim any merit for it. All the honor belongs to Schwalbe, and it will not be one of the least of the services which have been rendered to practice by the microscope, that it has finally lifted the veil which hid from us this question.

It is none the less true that to our dear and regretted master, Von Gaefe, belongs, we repeat, the honor of having anticipated the microscope. His doctrine concerning glaucoma will contribute powerfully, without any doubt, to render immortal this man of good and great genius.

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ART. II.—*Apyretic Malarial Menorrhagia. By J. W. Southworth, M. D., Toledo.*

Thinking the following case might be of sufficient interest to publish, from its rarity &c., I take pleasure in sending it in detail:

Miss K. B., aged about 20 years, of a robust and healthy family; parentage Irish, a native of this country, and a resident of Livingston county, N. Y. Temperament, nervous sanguine; applied for treatment of an obstinate and profuse menorrhagia. Said she had been troubled frequently for several years, and had tried several practitioners and did not get much benefit. The present attack had begun five weeks previously, had taken strong cinnamon tea, with some benefit; but it had ceased to have any effect. I found her skin cool; pulse, slow and soft; tongue, slightly coated; bowels, sluggish; appetite, poor; no *pain* anywhere. Believing it to be simple passive menorrhagia, from anemia chiefly, (as she was remarkably so in comparison with the other members of her family,) and also to want of tonicity of the uterine tissues, I gave her F. E. Ergot, gtts. xx, every four hours, with a laxative powder of podophylin, calomel and nitrate of potassa, every second day at bed time. Continued this for two or three weeks, when she reported herself almost well. Discontinued treatment; she was entirely well in about 10 days more. She quit work only one day; I had forgotton to state, her occupation was that of cooking. In two weeks she had a return of her trouble, but did not apply for treatment until the end of 2nd week, when she was so bad that she had to go to bed. Gave her ergot as before, and ordered cold compresses to the hypogastrium. She was so much better the third day that she got up and went to work, and was well in about eight or nine days more. Remained well two or three weeks and was again attacked; applied immediately for "some more of those drops." Not thinking it best to continue the ergot, I gave her gallic acid, grs. vi. in solution, every four hours, hoping thereby to make the cure more permanent, continued it for twelve days, when she was entirely well, (did not quit work this time.) She now remained amenorrhœic for five weeks, at the end of which time she became menorrhagic, and continued so for two weeks, when she took gallic acid as before, for two days with no benefit. I then resorted to large doses of persulphate of iron in solution *ter die.* Was better the third week, and was almost well at the end of the sixth, when she discontinued the medicine in disgust; she remained nearly well for three or four weeks more, then became suddenly worse. As a forlorn hope she invoked the virtues of the dacoction of cinnamon again, and got some better, continued it for a week longer and was nearly recovered. Remained in that situation for about four weeks more, then got much worse, (did not stop work,) and was quite bad for twelve days, getting better, or rather almost well again; *without medicine* during the week following the twelve days. At the end of three weeks she got much worse and applied to me. It became evident that there was something unusual in the case, and I expressed my fears to the patient that there might be some polypus or mucous growth in the uterus, of small size, and stated that I did not like to prescribe further until an examination was made. She seemed reluctant to submit to such, and wanted me to give her some more medicine.

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*These lines were written when I learned that Quaglino had published a number of cases of glaucoma cured by simple peripheral incision without iridectomy.

Recollecting that I had observed frequent and long drawn sighs, while she was at work, that she had some difficulty in getting to sleep in the forepart of the night, that her tongue was a little tremulous when protruded, I became convinced that nerve debility was a prominent factor in the case. Turning to that excellent work on Nervous Disorders, by C. Hanfield Jones, I found under the head of "Uterine Neuroses" some remarks which confirmed my belief, and I resolved to try the virtues of nerve tonics.

I then gave *ter die*, quinia sulph. grs. ii to iii, and iron by hydrogen, ditto; adding enough podophylin to produce a laxative effect. Also strychnia $\frac{1}{60}$ of a gr. and liquor, potassa arsenitis gtts, iii after meals, To my gratification I found she was much improved in three days. and in nine days was entirely well. I advised her to continue the medicine for a while, but she got tired of taking it at the end of a week. She was amenorrhœic for five or six weeks, then became menorrhagic. At the end of the sixth day of her period, she took five or six of the powders she had left, every four hours and she got well in a week, did not take the solution of strychnine and arsenic; had no pain nor fever. She did not consult me this time. I should mention before going farther, that from the time she got well from taking the quinine and strychnine and arsenic, she improved rapidly in healthy appearance and strength, as well as in ambition. Remarked that she had not been so well in years before. Her menses returned in three weeks from the last attack, and were moderately profuse; but did not cease after the first week. Had a little " show" after three or four weeks, when she got much worse. Was "much worse" for two weeks, when she applied to me for " some more of those powders!" I gave her some two grain powders of quinia sulph. *ter die*. She got worse for two days, and had to go to bed from loss of blood; directed her to take them every three hours. She took them and got no better. Her skin was cool, pulse 76 soft and regular, tongue moist and slightly coated. Had a dull itching pain in the lumbar region for the first time that she recollects. This was Thursday morning. I concluded to try the virtues of larger doses of quinia sulph.; still believing in the theory of nerve debility and the potency of nerve tonics. I gave 4 or 5 grs. of quinia sulph. every three hours until slight cinchonism was induced. Before night she was "ever so much better." This success led me to investigate this matter more closely in order to find the *cause* of this nerve debility The immediate effects of quinine induced me to suspect the influence of malaria. I questioned her regarding the hours of the day when she would be the worst, and to my surprise she stated that she was generally worse in the morning, when she first got up, and that in an hour or so after she had been at work, she would get better; and also that she had noticed that she was generally worse every other day, and that it had been noticable for several years but that she had not spoken to any of her physicians about it, "did not think it made any difference to them if it was so." I was ready to cry "eureka," but I thought I had better *cure my patient* first.

Suffice it to say that on Friday, (the day to be better according to the every other day periodicity which existed previous to taking medicine during this attack,) I gave the same doses as on Thursday, and in the afternoon of Friday, she got up and dressed herself and went down stairs. Saturday she cooked all day, and took two 5 gr. powders that day, and was nearly well.

I continued the antiperiodic doses every other day, with constant improvement until she was entirely well; which was just nine days from the time she applied for treatment. To prevent any more relapes, I directed her to take 18 grains in three doses, every 3d, 4th, 5th, 6th and 7th days from the date of getting well.

On the 3d week from last recovery, she was again menorrhagic due no doubt to the excitement of getting ready to go out west, and she states she was "just as nervous as could be."

She took antiperiodic doses of quinia sulph. as before and was well in eight or nine days from date of attack.

The absence of all other symptoms of malarial disorder, except the *periodicity* which characterizes this case, is certainly a rare occurrence, especially the absence of fever. However I think its periodicity and prompt amenability to the influence of large doses of quinia sulph alone, is sufficient evidence of its malarial origin.

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ART. III.—*Clinical Lecture upon Surgical Cases in the Buffalo Hospital of the Sisters of Charity*, by Prof. J. F. MINER.

Reported by LOUIS BRECHT, member of the class.

CASE VIII.—STRABISMUS.—J. Brown, aged 21, has come to our clinic for the purpose of having his right eye operated upon, for convergent Strabismus. You will see that both his eyes seem to be turned inwards, but closer examination in different positions will show you that the right eye is the one principally affected. Strabismus is a very common condition of deformity and greatly impairs good appearance. It may be hereditary, may be caused by injury or disease of the brain or nerves, and may be in various ways acquired. The deformity should be corrected as early as possible, for if the brain neglects to take cognizance of the image which is formed upon the retina for a great length of time, vision will be lost, the eye gradually becoming incapable of vision from long disuse. When one eye is affected, the other will often, in some degree accommodate itself to the same axis and appear as if also affected, this deviation is called concomitant squint, and will be fully explained hereafter; both eyes are sometimes similarly affected. The operation in the present case consists in dividing the tendon of the internal rectus muscle. For this purpose I make a small transverse incision through the conjunctiva through which I pass the hook, and taking up the tendon of the muscle divide it near its insertion, passing the scissors through the small opening in the conjunctiva. I also divide if necessary the subconjunctival tissue which seems to prevent in some degree the return of the eye to its normal position. This is not what most authors call subconjunctival operation, which is done by passing a hook shaped knife under the conjunctiva and dividing the tendon. Formerly large incisions were made through the conjunctiva, in this way exposing the sclerotic coat, and allowing the caruncle to retract thus aiding to, rather than diminishing the deformity; lately, however the operation is greatly modified, as you have seen this morning. A well conducted operation for Strabismus, simple as it may appear to you, requires skill and care on the part of the surgeon, for it is vastly more apt to cause deformity greater than Strabismus itself if discrimination is not exercised. You observe that the eye most turned is now straight, while the other eye shows slight convergance; in time both may assume positions in harmony with each other.

Case IX.—Strabismus.—G. Miller, aged 22 years, comes before you for the same operation. The deformity is the same and we will operate in the same manner.

Case X.—Strabismus.—The third patient, Mary G., a little girl 8 years of age, also requires operation for Strabismus. From her history I gather that she received a fall some years ago from which time the deformity commenced. We will operate as before, with the exception of placing the little patient under chloroform while the former two patients suffered the pain of the operation without it. The patient should be entirely under its influence, for if only partially so greater restlessness is present than if none had been given.

CASE XI.—NON-UNION OF FRACTURE.—Thomas Lincoln is 45 years of age, has an ununited fracture of the right humerus. He received a compound fracture near the middle third of the shaft of the bone in May last, while working on a gravel train. He entered the hospital immediately after receiving the injury and was treated with all the advantages available, yet no union could be effected. You will observe that a second joint exists above the elbow at the seat of fracture, which is caused by a ligamentous connection. Non-union of a fracture is not uncommon; it may occur in any bone of the body, more frequently, however, in the humerus and thigh. The causes of non-union may be constitutional or local. Among the former may be enumerated inherited and chronic diseases, and impaired nutrition. But there is no ground to apply these causes in the present case, for the patient is a healthy and well nourished man. Among the latter causes may be mentioned undue motion of the parts and separation of the fragments by intervention of muscle or other substance. Patients are very apt to blame the attending surgeon for such results, and to a surgeon in the country, where he is surrounded by jealous neighbors and doctors, such results would be very vexatious. Yet I do not wish to entirely exhonerate surgeons from such results, for bad dressing sometimes may be a cause; but oftener, in the majority of cases, the patients own carelessness, in undue motion, restlesness and uneasiness are the most active causes. In many instances, no adequate cause can be assigned. The one before you is of this nature.

Various methods of treatment have been recommended. Scraping the ends of the bones was employed at a very early period. This method was later improved by cutting off the ends and tying the fragments together with metallic wire. Dr. Brainard, of Chicago, employed a metallic perforator, in the shape of an awl, by means of which he bored through and destroyed the ligament. Resections of the ends of the shaft have been practiced, and I have myself pracitced it with some success. If bony union never takes place, the arm may still be made useful by suitably adjusted splints placed so as to envelope the arm. A seton passed through the cartilaginous band between the fragments was, it is said, first suggested by Dr. Winslow in 1787, but first successfully employed by Dr. Physick in 1802. The procedure is very simple and should, perhaps, be tried before any severer method. You observe that the seton, as now introduced, is passed with much greater difficulty than if passed through the fleshy part of the arm. It is designed to cause inflammation and the deposit of bony material. The arm will now be placed in immovable pasteboard dressings, and time afforded for bony union. Should this treatment fail, any of the other methods may be employed.

CASE XII.—SYPHILIS.—The patient before you entered the hospitable last Spring soon after the close of the lecture term, with immense enlargement of the testicles. One was suppurating and would probably weigh two pounds. He denied ever having had any private disease, and nothing of his history could be gained. We removed the testicle most diseased and allowed the other to remain; it has lessened in size, but is now the site of suppurative disease, and might as well have been removed. Aside from this history, as this patient is presented, it is an illustrative case of tertiary Syphilis. Now, gentlemen, what has produced this suppurative disease which has been going on in the testicles, and which has recently appeared on other parts, especially upon the face? Patients consult you and say boldly they have "pox," they also ask your advice and firmly deny having had any such disease; the one is worth as much to you as the other, so far as enabling you to arrive at any conclusion. Those who say they have had "pox" are often, very often mistaken, and those who say they have not, may intend to deceive. You are always then to go back in the history a little and ascertain if posible from what they have previously suffered.

The primiary lesion of Syphilis is essential to the secondary and tertiary symptoms; but the primary lesion may have been in the urethra or elsewhere out of sight, and is then called *concealed.* It may have been so slight and have produced so little irritation, as not to have attracted attention: but if there is Syphilis there has been a point of infection—*the primary lesion of Syphilis.* Following this there are general symptoms—eruptions upon the skin, sore throat, falling of the hair, rheumatic pains, general fever and emaciation—some, or all of these symptoms appear, generally within the first year after the infection, this constitutes what is called secondry Syphilis.

Later the disease affects the internal organs and bones. These later symptoms are grouped into what is called *tertiary Syphilis.* I do not propose this morning to minutely describe Syphilis, but to call your attention to the order of its "stages" so-called, and to explain the nature of the syphilitic node you observe upon the patient before you. *Nodes* appear chiefly upon tibia, ulna and skull, but here we find it upon the malar bone. It consists of a specific inflamation affecting the periosteum and sometimes bone giving rise to effusions of lymph, serum or a peculiar gummy deposit. These deposits undergo various changes, which mainly determine the varieties of the disease described by authors. Before you is a *suppurative node,* and from its extent, long standing and general appearance, it is feared that the bone itself is becoming involved in caries.

TREATMENT.—The treatment of this affection is the treatment of tertiary Syphilis. I have repeatedly told you that mercury is the only specific for Syphilis, and that though the disease will in some instances terminate favorably if left to nature alone, yet mercury does exercise an almost specific influence. If medicine has curative influence upon any disease, it is mercury in secondary Syphilis and when I am forced to believe otherwise, I shall also conclude that medicine is useless, and that all our observations have but blinded our eyes and led us more deeply into error. I am not insensible of the great worth and high standing of those who deny its curative power, and affirm that Syphilis can be better treated without it, but I assure you that if you prescribe it in suitable manner and time, you will be more and more impressed with its favorable effects. Blue mass is, according to my observation, the best preparation of the drug, though in all forms it is about equally efficacious. When you have obtained the effect of mercury upon the system, as shown by tenderness of the teeth and gums, you have in almost every instance obtained marked abatement or total disappearance of all the symptoms of secondary Syphilis. In the later stages and after full trial of mercury, you may suppliment it with iodide of potassium, a drug which has been more indiscriminately employed than almost any other. It is of signal service inthe management of all the later or tertiary manifestations of the disease, and as the case before you is of that nature we shall prescribe it, as at this stage, more suited to the case than any other remedy.

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Miscellaneous.

From the Albany Argus, Oct. 14, 1871.

Albany Hospital.

We publish the following excellent advice, by Professor Thomas Hun, to the Governors of the Albany Hospital.

The following letters declining appointments have been addressed to the Governors:

ALBANY, Oct. 6, 1871.

Geo. B. Steele, Esq., Sec'y, &c.:

Dear Sir—I received last evening your note enclosing the copy of a resolution passed unanimously by the Governors of the Albany City Hospital.

This resolution appoints myself with other gentlemen to positions upon the surgical and medical staff of the institution

While it is my wish to perform all professionalobligations, and co-operate in earnest efforts that the hospital may enjoy full and unreserved confidence in the community, I do not think the resolution attains this purpose, or that my acceptanee of the position would promote the object which the Governors as well as myself, earnestly desire.

The resolution in no way changes the status which impelled my resignation, nor can I see in it the evidence of that spirit of radical reform in the administration which will ensure genuine and hearty co-operation between the Governnors and staff as well as permanent and assured prosperity to the institution.

I beg, therefore, you will convey to the gentlemen of the Board myregrets in feeling compelled to decline the appointment.

Respectfully yours,

S. OAKLEY VANDERPOEL.

ALBANY, Oct. 6, 1871.

Geo. B. Steele, Esq.:

Sir—I have received your communication informing me of the action of the Board of Governors of the Albany City Hospital, in appointing me a member of the medical staff of that institution.

I beg through you to offer to the Board of Governors my thanks for the honor they have seen fit to confer upon me, and regret that it is not possible for me to accept it.

The withdrawal of certain former members of the staff from all connection with the hospital, and the attempted expulsion of others, for no apparent reason except that they were displeasing to Dr. Armsby, renders it certain in my mind that, as you now propose to continue it, there can be no harmony or unanimity of action in the staff so long as Dr. Armsby is connected with it. Until I can see a probability of the existence of such harmony, I must decline serving on the hospital staff.

I was nominated over a year ago by the medical and surgical staff of the Albany Hospital to fill a vacancy occasioned by the death of Dr. Pomfret, and was rejected by the Board of Governors mainly through the personal efforts of Dr. Armsby; and I can see no reason why my presence on the staff should be more acceptable to him now than it would have been then.

Again by a resolution passed by you nearly two years ago, you declared that it was inexpedient for any physician attending at the Albany Hospital to be connected in a similar capacity with another institution. Therefore, in order to accept your offer I should be obliged to sever my connection with St. Peter's Hospital, which I am not prepared to do.

I am therefore compelled to decline the appointment conferred upon me.

Very respectfully yours,

EDWARD R. HUN.

To the Governors of the Albany Hospital:

Gentlemen—I have received from the secretary of your board a communication dated October 4, informing me that I had been appointed consulting physician of the hospital. I respectfully decline the appointment and feel it due to myself and respectful to you to state the reasons which induce me to do so.

The communication caused me great surprise, for in a conversation with Mr. Olcott and Mr. R. H. Pruyn, I had given the reasons why was unwilling to accept an appointment, and in a friendly but frank and unreserved manner had expressed to them my views as to the causes which had induced the unfortunate condition of the affairs of the hospital. If the views I expressed and the statements I made had been presented to your board, I think you would have withheld the action you have taken, and thus relieved me from an embarrassment, for I had no desire to appear publicly in this matter, or to give publicity to what I then said. But since notwithstanding the notice I gave, the appointment has been made and publicly announced, I now feel called on to break the silence I had imposed on myself, and to lay before your board and the public the statements and opinions expressed by me in the interview referred to. Without this explanation, my action in declining the appointment, coinciding with that of others similarly situated, might be misinterpreted by the public as indicating a spirit of hostility to the hospital and a determination to resist all offers of conciliation.

I stated to these gentlemen that in addition to my general disinclination to mingle in controversies and strife, I had an insuperable objection to occupy a position on a medical staff with Dr, Armsby; that an experience of many years satisfied me that he and I could not act harmoniously in the performance of hospital duties, and that beside this radical difference in our views, I was especially averse to an association with him in this hospital because of the anomalous position he occupies in it.

It is well known to all of you that during the last few years Dr. Armsby has assumed the entire control of the Hospital, and that the action of your Board has been steadily directed toward the support of such assumption. The superintendent and all subordinates have been selected by him, and have received their orders from him, and he has not hesitated to interfere with and overrule arrangements of his associates whenever it has seemed fit for him to do so. If a vacancy was to be filled in the medical staff, the question before you has been, not how well is the candidate qualified for the place, but how is he affected toward Dr. Armsby. Those of his associates who became obnoxious to him were marked for dismissal, and in all respects the Hospital has been managed with a view of sustaining Dr. Armsby. Remonstrances against this management on the part of a small minority of your Board or of members of the medical staff were met with the reply, "Dr. Armsby has rendered great service to the Hospital, and he must be sustained."

It must be remarked that "sustaining Dr. Armsby" did not mean protecting him against assaults, for no one thought of interfering with him in the performance of his duties, or of removing him from his position, but it meant his assumption to interfere in everything and to control everything.

I appeal confidently to you all, whether it is not literally true that no man, however eminent in his profession, or whatever promise of usefulness he might hold out, could within the last few years have received a medical appointment in the Hospital if he were obnoxious to Dr. Armsby.

Now it may be that your Board thought the services of the Doctor in procuring contributions were so important, or that his administrative abilities were so eminent, that it was best to maintain him in his position, but surely it cannot appear strange to you or to the public that his associates were unwilling to be kept in a position of inferiority to one who could justify his pretensions neither by superior weight of character nor professional standing.

Allow me to recall to you a few events in the recent history of the Hospital illustrating my assertions.

Dr. Robertson, by his energy in establishing an Eye and Ear Infirmary, secured from the State an appropriation of $4,000 which, by his connection with the Hospital, passed into its treasury. Far more than this, he placed at the service of the institution his eminent skill in his capacity, by which he added to its reputation and extended its usefulness. He offended Dr. Armsby and was removed.

Some others of the staff were not reckoned among the adherents of the Doctor, to effect whose removal a regulation was invented by which they were made incapable of holding office because they served in another hospital. Some of them disregarded it, and your Board felt ashamed to enforce it, but Drs. Vanderpoel and Mosher retired in disgust from an institution promulgating such a stupid and odious regulation.

Then a petition was got up by Dr. Armsby and signed by his adherents on the staff, asking, in effect, that the names of Drs. Boulware, Quackenbush and myself be dropped from the medical staff and other names substituted in their place, and your Board, ever ready to "sustain" the Doctor, expelled us. I do not bring this up as a personal grievance, for I had already ceased to take any active part in the affairs of the Hospital and would have resigned if requested, and besides this I have been informed by signers of the petition, and by prominent members of your Board that they did not know that I was affected by their action. But what a commentary is this on the manner in which every project arranged by the Doctor is so blindly carried out by his adherents on the staff, and even by your Board, that they do not find out till afterwards what they have done.

And so the Hospital has been gradually relieved from all the opponents of Dr. Armsby and none but his professed adherents now remain. No one of his subjects openly rebels against him, though it is said, some of them occasionally relieve themselves by abusing him behind his back. This is the *harmony* at which you have been arriving. (The silencing of all sounds but one does indeed prevent discord, but does not produce harmony, which consists in the accord of different sounds. Submission would better express your meaning.)

To crown all, at the election just held you have been confirmed in your authority, and thus are successful at every point. And yet as often happens, when men follow their own will, without regard to the rights and feelings of others, this series of successes has ended in what you now begin to find, is a failure. You do not feel satisfied with your own work and the public is even less satisfied than you are.

You have been so intent on securing harmony, as you call it, that you have lost sight of the fact that you were driving off your best men; for accord with Dr. Armsby is not always the accompaniment of high professional standing. You are beginning to see that with one or two exceptions which it would be invidious to name, the strength of the profession is outside of the Hospital.

This may seem an ungracious thing to say, but I am engaged in a serious work and cannot let any false modesty or delicacy hinder me from saying that which you all know to be true and which is essential to the completion of my statement.

If my assertion is denied, then I ask, why these appointments have been offered to those who have so lately been driven off or expelled? What changes have occurred to make them more fit to be members of the staff now than then? Their places have been filled, and your staff is now more than sufficiently numerous. It counts enough, but does not weigh enough.

You did not think of this when in your eagerness for the removal of all that stood in your way, the heat and dust of the contest blinded you as to the tendency of your efforts. You were thinking then only of "sustaining Dr. Armsby." Now you find that you have to sustain not only him, but also the supports you have put under him, and begin to feel your burden.

In the hour of triumph you see that your victory has been barren.

Whose fault is it that the condition of the Hospital is not satisfactory? Those whom you have expelled have quietly retired, and have never attempted to embarrass its management. They have not even contested your resolution of expulsion which they are assured is legally invalid. They did make a supreme effort to restore a healthy life to the Hospital, and to relieve you from a painful responsibility, at the election just held, but they failed. They did their best and failed.

A good deal has been said about doctors quarrels, as if, in some way, they were the cause of the trouble. But what has a Board of Governors to do with doctors' quarrels? When you choose a doctor for your family, you select one who in your judgment is capable and faithful, and do not ask how he stands affected to this or that doctor. So in selecting doctors for the sick in the Hospital under your guardianship, your duty is equally clear; you have only to take the best men for the work to be done. Unfortunately you have been induced to attempt to secure the victory for one side of the combatants, and have come out of the fight with some scratches, as often happens to those who meddle in domestic quarrels.

Some of you now ask for co-operation to place the Hospital on a footing of more extended usefulness. It is one of the good traditions of our profession that none of its members has a right to refuse aid according to his ability, to a public charity which calls for it, and those whom you have driven out with insult are ready to co-operate with you—but on conditions. No hard conditions, but only the recognition of some elementary principles of which you have lost sight.

You are elected by the donors so to manage this charity as to carry out its true end, the relief of the sick and suffering. You were not elected to sustain or punish this or that Doctor, or to break down or strengthen this or that medical party.

Choose then from all the Physicians and surgeons of the city, those who have the confidence of the public, and hold out the best promise of usefulness to the sick. Let by-gones be by-gones, forget about doctors' quarrels, lay aside personal partialities, choose only with reference to the good of those who are placed under your guardianship; choose those whom you would choose for yourselves, and when chosen, sustain them in the performance of their duty, not one against the other, but altogether.

On these terms the co-operation of all good men is pledged to you.

Very respectfully,

THOMAS HUN.

ALBANY, October 4, 1871.

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Intemperance in Use of Quinine.

A newspaper says: There are various kinds of intemperance, and dosing is by no means the least of them. We are told that the amount of quinine sent from Philadelphia to the West this year is immense, and greater than ever before. In California, during the early emigration, men would squander a vast deal of money in quinine, which was not to be had for a song, prescribing for themselves, and turning medicine taking into a kind of self-indulgence. Undoubtedly, quinine, if it does no more, alleviates fever and ague; but a man who goes on taking it all his life and neglecting natural and ordinary precautions, will ruin his physical constitution and misspend his money.

There was a time during the penisular campaign, when many of the troops on the Chickahominy, under the advice of the surgeons, regularly took their whisky and quinine every morning, to ward off the supposed tendency in that locality to "fevers."—*Medical and Surgical Reporter.*

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Medical Colleges in Chicago.

The Chicago Medical College, Medical Department of the Northwestern University, is located in the south part of the city, in the same block with the Mercy Hospital, and was entirely out of reach of the fire; and as the students of this College were boarding in the same section of the city, they also escaped all injury or loss. Although Professors Isham and Byford suffered severely, losing both their residences and offices, and some of the other members of the faculty suffered minor losses, yet the regular lectures in the College were suspended only one day, and even on that day while the fire was raging with all its fury, Professor E. Andrews attended his clerical hour in the hospital and performed several operations in the presence of a large part of the class. The hour for these operations had been previously fixed, and their performance, together with the resumption of the full course of lectures the following morning, was not from any want of interest in the results of the fire or in the welfare of the community, but from the conviction that one of the most efficient modes of preventing demoralization and discouragement, when some great calamity has overtaken a community, is, for every man who has anything to do and a place left to do it in, to continue diligently at his work, and employ as many others in the same way as possible. The class in attendance is fully equal to that of any previous year.

The Rush Medical College, being located in the North Division of the city was entirely consumed with all its contents. Several members of the faculty suffered very severe losses, and many of the students boarding in the vicinity also lost their books and clothing. Of course their lectures were suddenly suspended. On the next day after the fire their faculty were officially notified that all their matriculated students would be permitted to attend the lectures of the Chicago Medical College free of charge, until the faculty could procure new rooms in which to resume their lectures. And in case they did not deem it advisable to resume the present term, their students who had actually paid their lecture fees were offered the privilege of completing their course in the Chicago Medical College without further charge.

In about two weeks the Facutly effected an arrangement by which they resumed their regular course of instruction, in the amphitheatre of the County Hospital. A large part of their students returned, and so far as we know, their work is progressing satisfactorily. In the present number of the EXAMINER will be found an appeal from the Visitors of that school to its Alumni throughout the country, for aid to rebuild the College. We hope it will meet with a liberal response.

The Woman's Hospital Medical College was also burned out. Occupying temporary rooms and a recently organized institution, it had not much property to lose, and soon resumed its course of instruction in temporary quarters in the West Division of the city.

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TINCTURE OF IRON IN ACUTE RHEUMATISM.—Dr. J. Russell Reynolds reports in the "British Medical Journal" eight cases of acute rheumatism successfully treated by the tinc. ferri chloridi. The pain was relieved very rapidly, and convalescence speedily established. In some of the cases the heart was implicated. The quantity given was fifty or sixty drops every six hours.—*Chicago Med. Examiner.*

To the Medical Profession of the United States.

The terrible calamity which has recently fallen upon the city of Chicago and upon various portions of the Northwest, has awakened the sympathy of the world, and both money and material have been sent to the suffering districts with an abundance and alacrity which has never before been witnessed; but no one who has considered the extent of the losses, or the amount of suffering entailed, can feel any apprehension that the work of charity is likely to be overdone, nor, indeed, that it will be possible to fill the measure of the actual want. There ought to be no relaxation in these general measures of relief for many months to come, nor is it probable there will be; but there is one class whose misfortunes appeal most especially to the members of our profession. More than a hundred physicians in Chicago, and probably as many more in other parts of the Northwest, have lost all they possessed. The intelligence received by us, from trustworthy sources, is of the most painful character; and it is with reluctance that we make public the fact that up to this moment seventy-seven physicians in Chicago alone have been driven to the necessity of placing their names upon the list of those requiring pecuniary aid. God forbid that we should delay to give them help. We beg you to reflect that the situation of these physicians, with their families, is peculiar. The laborer may find employment at his usual wages; the merchant may buy and build upon his credit; the clergyman has his congregation, much less able to pay than formerly, but nevertheless responsible for his support. The physician has ordinarily none of these resources. With neither house nor furniture, horse, carriage, nor instruments, he must do what little he can, and wait the slow returns from a population reduced, like himself, almost or quite to beggary. Our calling is never a lucerative one, but in Chicago today it can hardly be expected to supply the necessities of life, and perhaps not for a year to come.

In our opinion these seventy-seven doctors, and probably as many more, will need from $500 to $1,000 each to carry them safely through the year, and to put them once more upon their feet. From $50,000 to $80,000 is our lowest estimate of what should be sent to the Chicago doctors' relief fund; with this money they may be placed upon salaries, and in return perform such public services among the sick and poor as may be required.

We have already received from the physicians of New York over $5,000, of which sum $4,000 has been sent to Chicago. The remainder is retained for the purpose of aiding the physicians of Wisconsin and Michigan, and will be forwarded to Chicago or elsewhere as soon as we receive information as to where it is especially needed. Many of the other large cities have sent in similar contributions. We have no means of knowing how much has been contributed, but we have no doubt the sum is totally inadequate to meet the exigencies of the case. It is proposed, therefore, to continue the organization of the committee, and not to cease efforts during the winter, unless its services should seem to be no longer required.

To physicians living in scattered districts we take the liberty of suggesting organized action through country or local associations. Those who prefer can send their contributions direct to Walter Hay, M. D., Secretary of the Chicago Relief Committee, No. 384 Michigan Avenue, Chicago; or to the Secretary of this Committee, Samuel T. Hubbard, M. D., No. 27 West Ninth Street, New York. We earnestly hope that no physician in the United States will omit to contribute something, however small the amount may be, to this charity—in any way and through any channel they choose—but that they all give, and that speedily. If our medical brethren knew only a few of the examples of individual suffering which have come to our knowledge, but which we do not feel at liberty to publish, their contributions would not be delayed.

Surgical instruments may be sent to the following surgical instrument-makers in this city, by whom they will be forwarded free of charge: George Tieman & Co., 67 Chatham Street; Darrow & Co., 1227 Broadway; Otto & Reynders, 64 Chatham Street; Shepard & Dudley (formerly Ford & Co.,) 150 William Street; Stohlman, Pfarre & Co., 107 East Twenty-eight Street.

Books will be received and forwarded by Wm. Wood & Co., No. 27 Great Jones Street.

It may be necessary to add in explanation of the funds originally intended only for the physicians of Chicago, that the probability of an appeal from the burnt districts of Michigan and Wisconsin, determined the Committee to reserve a small portion for such an exigency, and further, that in consideration of the fact the medical students of this city have given very liberally to this fund, it was determined to suggest to those having in charge the distribution of these charities, that they will not overlook the claims of medical students who may in the same manner have been left destitute.

Frank H. Hamilton, M. D., *Chairman.*
Alfred E. Purdy, M. D., *Secretary.*
Samuel T. Hubbard, M. D., *Treasurer.*
Geo. F. Shrady, M. D.,
Chas. McMillan, M. D.,
Ed. S. Dunster, M. D.,
A. Underhill, M. D.,
J. C. Peters, M. D.,
F. A. Castle, M. D.,
F. A. Burrall, M. D.

Relief for Medical Men.

We take great pleasure in calling attention to the following appeal in behalf of the medical men of Chicago, sufferers by the great fire:

CHICAGO, October 19, 1871.

At a meeting of physicians held on the 17th inst., at No. 798 Wabash avenue, of which Dr. N. S. Davis was made Chairman, and Dr. E. Andrews, Secretary; the announcement having been made that communications had been received from prominent Physicians of other cities, to the effect that contributions for the relief of the suffering members of the profession here, are now awaiting the order of responsible parties to receive and distribute them. Drs. Moses Gunn, E. Andrews and A. Fisher having been appointed a committee to recommend suitable persons for a permanent Relief Committee of five, nominated the following gentlemen: Drs. S. N. Davis, De Laskie Miller, Ernst Schmidt, T. D. Fitch and Walter Hay, which nominations being unanimously approved, the following resolutions were adopted:

Resolved, That the Committee just chosen is hereby authorized to receive all donations for the relief of the respectable Physicians, who are sufferers by the late fire, distribute the same at their discretion, and render a strict account, with vouchers, to any future meeting, which may be called by the Chairman, to consider the same.

Resolved, That this meeting tender the cordial and heartfelt thanks of the profession of this city to their brethren in other and distant cities, for the prompt and liberal offers of assistance to the many among us who have lost, by the late terrible fire, not only their homes, clothes, books and instruments but their practice, and pledge a just use of whatever is given.

Contributions may be forwarded at once by express, or draft on New York, to Walter Hay, M. D., Secretary Medical Relief Committee, No. 384 Michigan avenue.

Donations from publishing houses, instrument makers and physicians, of books, instruments, or apparatus, will be gratefully received; as many of our professional brethren have saved only their lives.

DE LASKIE MILLER, M. D.
No. 518 Wabash Avenue, Chairman.
N. S. DAVIS, M. D.,
No. 797 Wabash Avenue, Treasurer.
ERNST SCHMIDT, M. D.,
No. 387 State Street.
T. D. FITCH, M. D.,
No. 296 West Monroe Street.
WALTER HAY, M. D.,
No. 384 Michigan Avenue, Secretary.
} Committee.

Editorial Department.

The Cuban Murder of Medical Students.

The history of crime and infamy does not furnish a more fearful story than the recent account of the murder of the student boys in the Medical College in Havana. A thrill of indignation moves every human heart at its recital, and language is incapable of expressing the horror of such inhumanity. We copy the following newspaper account of the tragedy, believing that such barbarity should stand recorded as history of a race of Fiends and Devils.

" Again our duty to the public compels us to record the horrible butchery of eight beardless boys by the military assassins, " volunteers," at Havana.

The heart grows faint as the eye scans the particulars of the many flagrant outrages perpetrated on the inoffensive, upon the plea of military necessity. It seems that, on Thursday, November 23d, a party of medical students visited an old cemetery, long since given up as a burial-place, and while strolling about, were detected by one of the volunteer soldiers—from the like of whom the Lord delivered any people—who made some insulting remarks to the boys which they retorted. The volunteer staid some time, and passing by the niche in which the body of Castanon—whom the Spaniards venerate as a political martyr, and who was killed by the Cubans in Key West—is deposited, noticed that the glass which covers the end of the niche was marked, apparently with a diamond, and that some letters uncomplimentary to Castanon had been scribbled on it. The volunteer called the attention of the curate to the fact, and rushed out, returned with several companions. This was the whole offence that had been committed. The boys had not been near the niche of Castanon, but as they happened to frequent the cemetary, using it partly as a playground, and partly for the collection of human bones for the study of osteology, they were accused and arrested. On Monday a court martial was convened, composed, first, of all the officers of the regular army; but as they refused to find cause for trial, another was subsequently assembled, which belonged body and soul to the volunteers. The poor victims were drafted or chosen by lot, one out of every five. The oldest of the eight was not eighteen years of age, and one was not fourteen; and although all communication with any of the forty-two has been impossible since, it has been proved that of the eight executed, three at least had not been in the cemetery. The thirty-one not sentenced to death by lot were condemned to the chain-gang for periods varying from two to ten years; and the sentences of these latter were carried into such immediate execution, that they appeared with their hair cut short, in convicts' dress, and guarded by armed volunteers, at the murdering of their classmates, which they were forced to witness.

At four o'clock in the afternoon, a detachment of volunteers was seen to issue from the jail, closely followed by several priests, by the students sentenced to death, and by the commander of the place, Colonel Villalonga. Not a sound was heard, the young men thus cruelly sentenced to meet an early and sudden death marched bravely forward. They knelt down, muttering a prayer, the firing party of the volunteers were drawn up in order, the command to make ready was almost whispered, the commanding officer of the volunteers turning his head aside to hide his emotion. Then came another short command to take aim, immediately followed by the fatal word " fire," when all were seen lying on the ground, four motionless, and four in the last agonies, from which kindly bullets relieved them.

Such are the details of the murder. When we read that the assassins marched through the city—a mob feared by all local authorities—shouting, " Death to the students !" and demanding the right to discharge their rifles at pleasure; when we know that many students, arrayed in the obnoxious costume of the chain-gang, are now sweeping the streets of Havana, by the decree of the model court-martial; when we are assured that the bodies of the youthful victims were denied their relatives for Christion burial; and when, as a consequence of the murders, fathers, mothers, sisters, and relatives are shrieking throughout the city—hopeless cases of insanity—every sympathetic feeling is wrought to the highest pitch of indignation, and an appalled civilization joins in the cry: "Good God! how long?" At this rate, the voluuteers of Havana will far surpass the Communists of Paris in atrocity.

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Medical Colleges and Graduates in the United States.

We are informed by private correspondence that Dr. Toner's' statistics for the Department of the Interior, show in the United States.

MEDICAL TEACHING BODIES.

Regular	60
Pharmacy	16
Dental	8
Homœopathic	8
Eclectic	6
Botanic	2

Forty-eight of the colleges have furnished statistics of 1870 which show 4,989 Matriculants; 1,500 Graduates; 77 *Ad Eundem*, and 15 honorary degrees.

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Books Reviewed.

Bright on Cancers, its Classification and Remedies. Published by S. W. Butler, M. D., Philadelphia, Pa., 1871.

The aim of the author, he says, "has been to place in the hands of the profession a work that will save much labor in collecting facts, and at the same time give a classification that will remove the difficulty of having so many names for the same form of cancer." His idea of classification seems fully expressed in the phrase, "cancer is a morbid growth containing the cancer cell." His therapeutics is briefly announced "to remove cancer you must remove every cancer cell," and his treatment is expressed in numbers as follows:

"With this explanation I shall proceed to give the remedies and their compounds. That they may be the more easily recollected, I will number them, as far as the general remedies are used, so that when a number is referred to, the exact remedy used may be known, and applied in each case and class.

No. 1. Solid extract of podophyllum (the root), one part; pure choloride zinc, three parts; starch, one-fourth part; red saunders, one-fourth part; water sufficient to form a thick paste. The object of the starch is to give tenacity to the paste, and the red saunders to give porosity, that the plaster may not run, and at the same time give porosity enough to let the full effect of the active articles pass to the sore, where they are rapidly absorbed. This preparation will keep any length of time in a glass or porcelain cup.

No 2. This is simply a saturated solution of chloride of zinc. It must be chemically pure, kept in a glass-stoppered bottle, and when applied, a glass brush should be used.

No. 3· This is a paste like No 1, with the exception of using carbolic acid instead of water.

No. 4. This is an arrow made of pure chloride of zinc. Take enough starch to absorb the moisture of the chloride, work together on a pillplate with a wooden spatula, just enough starch being added to make a stiff paste. Roll the paste into thin cakes, and cut the arrows to a point; then roll gently, and dry on a plate at 212° Fahrenheit. These arrows, properly prepared, and put into a glass-stoppered bottle, will keep any length of time.

These are the potent remedies generally used in in open cancer; all others are only auxiliries, but, in their place, of great importance. We shall give them when we give cases, etc. We shall only give a few cases of each class, deeming that sufficient to guide any one who wishes to try the remedies. We have classified cancer, and shall not repeat the classification.

CASE I.—Mr. Webb, August, 1864, called on me with a sore on his cheek, which had existed for several months. Upon examination, I found it filled with cancer cells. This was an epithelioma. The sore was raw, and the edges everted. I made three applications of No. 1 plaster, spread on a piece of cotton cloth fully large enough to cover the sore and margin; confined it with adhesive straps. It was removed once in twenty-four hours. After the third application the surfface of the sore was white and hard. I then ordered a poultice of light bread and water to be applied,and to be renewed every six hours. In six days the cancer fell out, leaving the edges and bottom smooth. The lump that came out was one inch in diameter, and more than half an inch thick in the centre. By dressing it with simple cerate it healed in due time, and left a smooth scar. It remains well."

The author talks very like an itinerant cancer doctor; seems to think he has received a new revelation, says: "I am persuaded that when fifty years ago I cut out cancers, I did not cure ten per cent. of them, while now, one thing I know, I have not for the last twenty years lost ten per cent. of my patients."

The publisher makes a note on condurango, repeating the old story (Bliss, Colfax & Co.'s story) and says: "If all is true that is claimed for it the great dissideratum pointed to by the author of this book—the discovery of an agent that will reach the specific virus of cancers and neutralize it—is already met.

The work contains valuable resume of the history, nature and various plans adopted for the treatment of cancer, but his favorite plan of treatment requires confirmation, and his positive declarations of cure would sound better if applied to some other disease more often know to terminate favorably.

Thoughts on Chronic Inversion of the Uterus. By Henry Miller, M. D.

This pamphlet contains a very able article on a very interesting subject, and plainly shows that the author has thoroughly investigated the various plans of treatment advocated by different authors, for this condition of the uterus. He first speaks very favorably of the amputation of the organ, and shows, that the operation in successful cases does not in the least impair the health of the patient, but may in many respects promote the same. After this, the author says: "It had been settled as a cannon in obstetric medicine, that an inverted uterus cannot be reduced by any kind of manipulation, when any considerable time has elapsed since the displacement occurred. Few were bold enough to make the attempt, after the lapse of a week or two; but after the lapse of months, when involution had restored the organ to its unimpregnated size, none had the hardihood to venture upon such an experiment. The profession were aroused in this country from servile submission to authority by the publication of a case of chronic inversion of the uterus of six months duration, successfully reduced by Prof. James P. White, of Buffalo."

Our author speaks of the methods of manipulation practiced by Prof. White, first in this country and by Tyler Smith about the same time, in England, with great favor, but gives statistics showing more favorably for amputation in its results than restoration as thus far reported.

It seems to us, that after all, his statistics if properly interpreted will convince unbiased minds that re-position is more safe than amputation, and in all respects more satisfactory to the parties interested in such a procedure.

Remarks on Wine and Alcohol. By Chas. A. Lee, M. D.

In this pamphlet the author first describes the natural order to which the vine family belongs, the process of obtaining the wine, the composition of wine,the amount of alcohol in wine, the source of the alcohol, cause of acidity of wine, the adulteration, physiological effect of wine, dietetic therapeutical use of wine. He then speaks in a similar order of alcohol. It contains very interesting and useful information and shows that the author is thoroughly familiar with the subject.

The Prevention of Abcesses in Hypodermic Medication. By Reuben A. Vance, M. D.

The author mentions the following circumstances of importance in hypodermic medication. The solution should not be too dilute, nor too strongly acid. That the material of the needle should be of gold, and that the size of the syringe should be small, so that it may be held with ease between the fingers. He also describes the method of manipulation, and gives a discription of an instrument for the injection of strychnia.

Clinical Examination of Urine. By Reuben A. Vance, M. D.

In this pamphlet are given some simple practical plans to determine the constituents of urine. In connection with this a description of a convenient apparatus for its speedy analysis.

A Contribution to the Treatment of the Versions and Flexions of the Unimpregnated Uterus. By Ephraim Cutter, A. M., M. D. Boston: James Campbell. 1871.

This pamphlet of 44 pages, contains a very able article on the above subject. It is illustrated by twenty wood cuts, showing the different abnormal positions of the uterus and the instruments and methods employed in its treatment. We recommend it to the general practitioner who will find it very interesting and instructive, containing full explanations of the most approved methods, of treating various uterine displacements.

The Physicians' Dose and Symptoms Book. By Joseph Wythes, M. D. Philadelphia: Lindsay & Blakiston, 1871.

This little work, which may be carried conveniently in the pocket, is intended to furnish assistance to the student of medicine, and to the general practitioner often saving him the trouble of referring to larger works. It contains an index of diseases and their proper treatment, some pharmaceutical preparations commonly used by the practitioner, a table of symptomology, and various other useful tables.

Gems of Pen Art. By Charles B. Knowlton.

This beautiful little work, filled with truly fine gems in the art of writing, has been handed us by the author. Although not a medical work we cannot forego the pleasure of giving it a notice in our pages. The work comprises over thirty pages of matter pertaining to the art of writing, some dozen of which are taken up with instructions to the learner, the balance of the work being devoted to specimens of the different styles of writing and to some very beautiful pen drawings.

The engraving is done on fine thick paper and presents a fine appearance. The theoretical part comprises some valuable hints, and cannot fail to form a valuable adjunct to the school and counting-room.

The Scientific American.

This valuable paper enters upon its twenty-seventh year with the opening of 1872.

It will continue its interesting papers and editorials on New Inventions, Architecture, Agriculture, Engineering, etc., etc., and cannot fail to be interesting to the farmer, mechanic, and in fact to all who are interested in the progress of Science and Art. It will also contain a weekly official list of all patents issued. The numbers of Scientific American are all finely illustrated and are printed on the finest quality of paper. It is a paper interesting as well in the family circle as in the work shop, and cannot fail to give satisfaction.

Skin Diseases, their Description, Pathology, Diagnosis, and Treatment. By Tilbury Fox, M. D., Lond., M. R. C. P. First American from last London edition. Edited by M. H. Henry, M. D. New York: Wm. Wood & Co., 1871.

The editor of the American edition has not followed the fault so often practiced by translators and editors of foreign works, of modifying and changing the teachings of the author by copious notes. The author in the preface says: "The present work may be regarded as a second and condensed edition of my two former works (Vegetable Parasitic Diseases, and Skin Diseases in General) combined, rewritten and recast, so as to suit both practitioners and students."

The work comprises over three hundred pages of matter, including a Formulary for use in treatment of skin diseases, and a copious Glossarial index.

Some considerable portion of the work is occupied by the consideration of diseases which are mostly confined to warm or tropical climates, and would, therefore, not come under the observation of the majority of American practitioners.

As a work to be placed in the hand of the student wishing to gain a knowledge of skin diseases it is quite valuable, and will undoubtedly be of use to the general practitioner.

Manual of Midwifery. By Alfred Meadows, M. D., Lond. Philadelphia: Lindsay & Blakiston, 1871.

In looking hastily over the contents of this work we find that it is a pretty complete work upon obstetrics; few subjects in the whole field, but have passed under the notice of the author. It is concise, well arranged and remarkably complete, and as a guide to the student in his lecture term, and as a ready reference to the physician, no work of similar character equals it in value.

The Clinical Thermometer. By Z. C. McElroy, M. D.

The author speaks of the value of the instrument in the following manner;

"That the clinical thermometer, in connection with previous history and present rational symptoms, in any given case whatever, inasmuch as it reveals the actual condition of motion—that is chemical changes in the material of molecular forms of structure, or design, or material, ascending to or descending from forms of structure—the only thing pertaining to a human body, well or sick, alive or dead, which any remedial measure or agent whatever can influence—is, in the hands of the actual working practitioner, who can for the time being forget all mental conceptions connected with "disease," as popularly and professionally understood, an instrument of as much precision and certainty as any employed by civil engineers or mechanics in our own times."

Physicians' Visiting List for 1872. Philadelphia, Lindsay & Blakesston.

This is an able and favorite memorandum book, and it seems that there is no occasion to speak of its necessity to physicians. It is made in different styles of binding to suit all wants; the one we have received closing with the tuck as formerly. This is adapted to all the different necessities of physicians, in style, size, arrangement etc. Almost all physicians are familiar with its use and it requires no further description.

Physicians' Daily Pocket Record. By S. D. Butler, M. D. Philadelphia: Office of the *Medical and Surgical Reporter.*

This is the most elegantly made and well arranged book of its kind and too much cannot be said in its favor. The manner of its closure, by spring, is a convenience worth noticing. While the tasty style of its binding and importance of its contents, make it what may truthfully be called *superior.*

Report to the Surgeon General on an Improved Method of Photographing Histological Preparations by Sunlight. By Assistant Surgeon J. J. Woodward, U. S. Army, Washington, 1871.

In connection with a complete description of the processes adopted, we have received specimens of what may be accomplished. They very beautifully represent the following objects:

Striated muscular fibres of mouse. Magnified 500 diameters.

Small artery and capillaries from lung of frog. Magnified 500 diameters.

Sebaceons glands in eyelid of calf, 500 diameters. The secreting cells of the gland lobules, and, their nuclei are well shown.

Section of kidney of frog, showing nuclei of secreting cells. Magnified 400 diameters

Section of liver of Pseudo-Triton, polygonal cells and thin nuclei shown.

Section of ovary of cat, showing tissue of ovary and immature ovules imbedded, 400 diametres.

Section of ovary of cat, showing graafian follicle lined by the zona granulosu, in which is imbedded an ovule with germinal vesicle and germinal spot.

These photographs are very beautiful and show with what consumate skill Surgeon J. J. Woodward has perfected the art. The profession are placed under lasting obligations for the beautiful and truthful expressions he is furnishing both in histology and pathology.

American Practitioner.

We have to acknowledge the receipt of elegantly bound volumes No. III and IV, 1871, of the *American Practitioner*, edited by David W. Yandell, M. D., Professor of Clinic Surgery in the University of Louisville, and Theophilus Parvin, M. D., Professor of Medical and Surgical Diseases of Women, in the same university. This journal is one of the most attractive and instructing medical journals of the country, being conducted with great ability and discrimination. It is published monthly in Louisville and makes two yearly volumes of near four hundred pages each. We extend to the editors our hearty thanks and congratulations, and assure them that their volumes will be highly prized, containing, as they do, a faithful record of the progress of medicine and surgery.

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Wanted.

Complete files of the former Buffalo *Medical Journal*, and volumes I, II and V of the present Buffalo *Medical and Surgical Journal.* Any one having the above journals *complete* can obtain satisfactory prices for them by addressing editor Buffalo *Medical and Surgical Journal.*

The Chicago Medical Examiner.

We copy from this Journal the following:

Explanation.—The present number of the **Examiner** was just ready for delivery, but had not been sent out of the printing office, which was located in the North Division of the city, when the great fire occurred. It was consequently destroyed so completely that not even a scrap of the original manuscript was left. Some of the articles were soon reproduced and others substituted with a view to a speedy re-publication. But the fire had destroyed every press in the city in which book and medical journal work could be printed. We have waited patiently five or six weeks in the hope that our old printers would be ready to resume work, but have at last been obliged to send to Ann Arbor for the printing of the present number. The November and December numbers will follow in quick succession, and by the first of January we expect to be on time with the first number of the new volume.

The subscription list and all the books belonging to the **Examiner** were preserved. We hope all subscribers who are in arrears will immediately pay up, and new ones send in their names for the next volume.

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Bowdoin Medical College.

We take pleasure in announcing that our friend, Prof. E. W. Jenks, has accepted for one year the chair of Obstetrics and Diseases of Women and Children in Bowdoin Medical College. The performance of his new duties will in no way interfere with the Doctor's relations as President or Professor in the Detroit Medical College.

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Annual Report of the Surgeon General. United States Army, 1871.

We copy the following statement from the Surgeon General's report, which will be instructive and interesting to our readers:

ARMY MEDICAL MUSEUM.

The Army Medical Museum continues to increase in the number and variety of specimens and its consequent usefulness. The number of specimens added during the year was 1,516, a present total of 15,018.

The number of visitors was over 15,000 during the year.

MEDICAL AND SURGICAL HISTORY OF THE WAR, &C.

Part First of the Medical and Surgical History of the War is near completion, and will be laid before Congress during its coming session, when it is hoped sufficient appropriation will be made to continue the publication of the remaining parts. Circular No. 4. a report upon barracks and hospitals, with a description of military posts throughout he United States, compiled by Assistant Surgeon J. S. Billings, U. S. Army; Circular No. 3, 1870, approved plans and specifications for hospital posts—also, a revised edition of the same (Circular No. 2. 1871), has been carefully revised and published during the year, and the Standard Supply Table of the Medical Department of the Army, (Circular No. 1, 1871), has been carefully revised and published with a view to more rigid responsibility and greater efficiency.

Books and Pamphlets Received.

Elegant bound volumes of The American Practitioner, Vols. III and IV., David W. Yandell, M. D., and Theophilus Parvin, Editors.

Transactions of the Twenty-sixth Annual Meeting of the Ohio State Medical Society. Held at Cincinnati, April 4, 5 and 6, 1871. Cincinnati: Bosworth, Chase & Hall, 1871.

The Physicians' Daily Pocket Record, comprising a Visiting List, many useful memoranda, tables, etc., for 1872. Philadelphia, S. W Butler, M. D., 1872.

Modern Medical Therapeutics; a compendium of recent formulæ and specific Therapeutical Directions. By Geo. H. Napheys, A. M., M. D. Third edition—revised and improved. Philadelphia, S. W. Butler, M. D., 1871.

Transactions of the American Medical Association, Vol. XXII, 1871.

Stimulants and Narcotics; Medically, Philosophically, and Morally considered. By Geo. M. Beard, M. D. New York, G. P. Putnam & Sons, 1871.

Boylston Prize Essay, 1871. Diseases of the Skin; the recent advances in their pathology and treatment. By B. Joy Jeffries, A. M., M. D. Reprinted from The American Journal of Syphilography and Dermatology. Boston, Alexander Moore, 1871.

Transactions of the Medical Society of the State of Pennsylvania at its Twenty-second Annual Session. Held at Williamsport, June, 1871.

The Principles and Practice or Surgery. By John Ashhurst, Jr., M. D. Illustrated with five hundred and thirty-three engravings on wood. Philadelphia, Henry C. Lea, 1871. Buffalo, Breed, Lent & Co.

On the Treatment of Pulmonary Consumption by hygiene, climate and medicine, in its connection with modern doctrines. By James Henry Bennet, M. D. Second edition. New York, D. Appleton & Co., 1872. Buffalo, Breed, Lent & Co.

Neuralgia and the diseases that resemble it. By Francis E. Austin, M. D., Lond. New York, D. Appleton & Co., 1872. Buffalo, Breed, Lent & Co.

Transactions of the American Ophthalmological Society, Eighth Annual Meeting. Newport, July, 1871. New York, D. Appleton & Co.

Medical Thermometry, and Human Temperature. By C. A. Wunderlich and Edward Seguin, M. D. New York, Wm. Wood & Co., 1871. Buffalo, Breed, Lent & Co.

A Practical Treatise on Bright's Disease of the Kidneys. By T. Grainger Stewart, M. D. Second edition. New York, Wm. Wood & Co., 1871. Buffalo, Breed, Lent & Co.

A Handbook of Therapeutics. By Sidney Ringer, M. D. New York, Wm. Wood & Co., 1871. Buffalo, Breed, Lent & Co.

BUFFALO

Medical and Surgical Journal.

VOL. XI. JANUARY, 1872. No. 6.

Original Communications.

ART. I.—*Medical Society of the County of Albany. Semi-Monthly Meeting, Dec. 13th,* 1871. *Reported by* JAMES S. BAILEY, M. D.

Dr. JOSEPH LEWI, President, in the Chair.

Dr. JNO. P. V. QUACKENBUSH, after congratulating the President and making a few complimentary remarks, proceeded to report a case of HYSTEROTOMY.

Mrs. Madison, a deformed dwarf, aged 30, prima-para Nov. 19, supposed she was about to be confined and sent for Dr. Northrop, of this city. The next day being called out of town he notified her it would be impossible for him to attend her, when she sent for a midwife and remained in her charge till the evening of the 22d, when Dr. Quackenbush was called and found the pains frequent and severe. On examination he found the head firmly compressed and trying to enter the superior strait of a deformed pelvis. He at once saw the impossibility of a natural delivery, and assisted by Dr. C. H. Porter he performed craniotomy, but found that the skull, though collapsed, could not be drawn through the contracted strait. Nothing now remained for the woman save the chance which the caesarean operation, performed under unfavorable circumstances, might offer. As the patient was exhausted by the protracted labor and want of rest they thought an opiate would be desirable and gave her 1-2 grain of morphine, which procured her a good night's rest, and she awoke refreshed on the morning of the 23rd. He now proceeded to operate, assisted by Drs. Thompson. Hun, Porter, Boulware, Robertson and Lyon. Dr. Thompson administered the ether, and the patient being duly anesthetized, Dr. Quackenbush made the incision through the abdominal walls from a point one half an inch below the umbilicus to within two inches of the pubis. The wound being laid wide open and the intestines drawn one side, the distended uterus was brought fully in view. An incision four inches in extent was made through the walls through which the foetus was first extracted; the placenta was removed through the same orifice. In making the incision through the uterine walls an artery was severed, and considerable hemorrhage ensued, which could only be restrained by the introduction of a silver suture which was used with a second one to bring the gaping edges of the wound together, as the uterus remained in a state of inertia. After the cavity had been cleansed the external incision was brought together and kept in position by five deep silver sutures and four hair lip pins twisted in figure of eight style with silk thread. The abdomen was now cleansed with warm water and adhesive straps drawn between each of the sutures and a compress and bandage applied around the body.

The patient now came from under the anæsthetic, appeared well, and only complained that the bandage was rather tight. She remained comfortable during the day. Thursday slept well during the night; remained in the same condition Friday and Friday night. On Saturday morning the case appeared encouraging, but in the afternoon her breathing became laborious and her pulse much accelerated. During the night she became delirious, and died of peritonitis on Sunday morning, having survived the operation seventy-two hours.

The following causes for the unfavorable result are assigned by Dr. Quackenbush:

1st. The long duration of the labor which had continued for ninety-six hours. Prolonged muscular action, not only reduces the strength of the patient, but favors hemorrhage from the uterine incision and the utero-placenta sinuses by the induction of uterine muscular inertia, and consequently the failure of prompt contractions after the removal of the fœtus.

2nd. From the general exhaustion which favors the production of a fatal result from shock, peritonitis and septicaemia.

3d. His waiting to perform craniotomy prior to the caesarean section, which caused the patient additional exhaustion, and,

4th. The necessity of using the sutures to draw together the wound in the uterus, caused by the want of contractability of its tissues.

Dr. Quackenbush remarked, with the light of experience afforded by this case, should he meet with a similar case he would operate promptly and at once, for he thought these cases promised success as much as did those where craniotomy was performed, for in the former we find patients in health, in the latter they undergo exhaustion consequent upon diseased action for one, two, or three days.

Dr. Quackenbush said, having now, Mr. President, given the Society the history of this individual case he would give a brief summary of the case, furnished by Dr. Robert P. Harris, President of the Obstetrical Society, of Philadelphia, his opinion as to the more frequent performance of this operation, &c.

Dr. Quackenbush then read extracts from a letter Dr. Harris had recently sent him. He remarked that Dr. Quackenbush's case was undoubtedly the most recent operation in the United States, and said: "I have found five cases for 1869, but only two for 1870 and one for 1871. No doubt there have been other operations but they have not as yet been reported.

In the next number of the American Journal of Obstetrics will appear an abstract of caesarean cases credited to the United States, many of them almost inaccessible to the profession by reason of the scarcity of the journals in which they have been published. Your case will close this collection. I have found eight English and seven American cases in which uterine sutures were used, twelve of them having occurred during the past seven years, with four recoveries. Your case was, like many other, lost on account of long delay in the hands of a midwife. Had you been called early there would have been no muscular inertia of the uterus, and peritonitis, which is an adynamic inflammation in many cases, and especially favored by exhaustion, might not have recovered.

I am glad to see that operators are becoming less afraid of the employment of uterine sutures, and especially those of silver, cut close and bent down upon the face of the uterus, as these have been found, after death, not to have occasioned any peritonitis, except of a local character sufficient to close them in a deposit of lymph. I believe the longitudinal spiral or interrupted suture of Spencer Wells might be made of considerable value; it certainly did well in his case."

Drs. Craig, Vanderpoel and others participated in an interesting discussion upon the case reported.

Dr. Quackenbush related the history of the case where a negro girl operated upon herself with a case-knife in Nassau village, eighteen miles from this city. She was taken in labor and went behind the barn and performed the caesarean section upon herself, as before mentioned, then returned to the house and sent for a doctor. When he arrived he found her nearly pulseless from the shock and loss of blood. The doctor could get but little from her in reference to her condition, but noticed she held her hand over her abdomen. Upon close scrutiny he observed her clothing bloody, and then immediately discovered the cause. He closed the wound in the usual way and the patient recovered. The attending physician related the case to Dr. Thomas Hun of this city.

Dr. JOSEPH LEWI gave the history of a case of THROMBUS VULVA. On the 7th of October he was called to see a woman that received a fall. Upon arriving at the sick room he learned that she was in her ninth month of pregnancy, and that two hours before she undertook to clean the top of a bureau, to accomplish which she stood with one foot on a wooden chair and the other on the top of a chest. That while dusting she lost her balance, and in her effort to regain herself, the chair turned and she fell astride of it. She was immediately placed in bed her countenance indicated violent pain. At intervals of three or four minutes she appeared as if having labor pains; in the intervals she complained of smarting, cutting pains in the region of the vagina. He beheld a sight after exposing her which he never before observed. In the region of the vagina, between the legs, there was a tumor the size of a new-born child's head, perfectly round in appearance, and of a dark, livid color. The substance was as hard as a foetal head. In trying to ascertain the extent of the injury he found that it was impossible to introduce his finger by the front under the os pubis as well as on the side of the vagina. So he by great exertion reached the os uteri posteriorly, causing much pain to the patient, and was astonished to find the os not dilated in the least. The pulse was 70. Dr. Lewi concluded not to resort to active treatment as recommended by different authorities, and ordered warm water applied to the tumor and prescribed morphine to alleviate the pain and give rest. Dr. James S. Bailey was then sent for in consultation. The expectant course was adopted for the time being. The anodyne had the desired effect and the patient was more comfortable the next morning. The Hæmatocele remained the same in size and consistency, but the color was less dark on the left side and center, but of a very dark color along the edge and extending from two to three inches towards the center. A small quantity of dark fluid oozed from the internal half of the tumor. Pains resembling labor occurred from time to time with more or less violence and had to be controlled by opiates. The urine was passed during the night, and no alarming symptoms being manifest, the same treatment was continued.

On the 3rd day after the accident Dr. Lewi was summoned many times, the woman was supposed to be in labor and near delivery. A careful examination proved that labor had not even begun. The pain was produced by the congestion of the parts. The dark color of the edge of the left labia was reduced to the width of two inches; the consistency of the tumor was just as compact as before, but on the outside a little more elastic. The general symptoms were more favorable, the pulse more regular, the bowels were moved by an injection, and the urine passed voluntarily.

On the morning of the 10th, sixty hours after the accident, the tumor broke on the inside of the vagina, letting out a large quantity of fluid and coagulated blood, diminishing the outside tumor to half its former size, and leaving at the place of rupture a cavity the size of a hen's egg. The patient declared that she was now for the first time, without pain. A very offensive odor filled the room. A mild solution of carbolic acid was used as a wash, continuing the warm applications externally as before, and a nourishing diet was recommended. The hemorrhage continued up to the 11th; the size of the tumor was now one-fourth of its original size. The discoloration was reduced to a narrow strip. The pulse was now almost regular, and the general condition of patient much improved. The functions then were performed naturally and there was a desire for food; anodynes were no longer necessary.

On the 13th premonitory symptoms of labor commenced. The os uteri could be reached without difficulty and without pain to the patient. The dilatation indicated the approach of real labor. On the 17th at noon Dr. Lewi was called, and while preparing for an emergency, he discovered upon examination that the tumor was no impediment to a successful delivery. After two hours she had the pleasure of folding the new born infant in her arms. The application of astringent washes were now discontinued; there was no hemorrhage, no gangrene, and no sloughing followed. The tumor has disappeared and the patient enjoys excellent health.

Dr. Quackenbush then read from the American Journal of Obstetrics a portion of Dr. Barker's lecture upon the subject, and remarked that he had seen two cases. One case occurred in the practice of Dr. Armsby; the tumor was freely incised and the cavity washed with ferri sulphatis. The second case he saw in consultation with Dr. Crounse in the country. This tumor was the size of a foetal head; he applied the forceps and delivered, but the tumor was ruptured and lay in shreds; sloughing took place and the woman died.

Dr. S. O. VANDERPOEL then presented a rare anatomical anomaly, a HORSESHOE KIDNEY. The specimen was sent to him by Dr. John P. Gray, of the Utica Asylum. It occurred in a female in a case of paresis. When the autopsy was made, at first the kidney could not be found, but was finally found laying flat upon the spine; instead of the kidneys being united below with a firm band, which is sometimes the case, the union took place above, and the structure was the same throughout, and is undoubtedly congenital. The ureters passed out from the lower third of kidneys on the back side. Paresis is a rare disease in females, some English authorities deny it. Dr. Gray has now two or three cases in the asylum.

The Society then adjourned.

ART. II.—*Fractures Treated at the Buffalo General Hospital. By* C. C. F. GAY, M. D.

During my term of service for 1870 and 1871 there were treated twenty-six fractures. For purposes of advancing surgical science of fractured bones, the individual fractures named in the following table cannot be given with sufficient accuracy and minuteness. For instance, in some of them the precise point of lesion and whether the fracture was oblique or transverse, are not stated, neither is the cause given in the hospital records. The records are deficient in not stating also the manner in which the injury was inflicted. More attention will hereafter be given to make the records more complete, so that the cases may be reported in a way that will, it is hoped, contribute something to the science and art of this branch of the profession.

With these remarks I will give the table of fractures that have been furnished me by the House Physician, Dr. Harrington;

I will premise, however, by saying that these fractures are those only treated during the writer's term of service, having no reference to those treated in the same institution during the service of my colleagues.

Scapula corocoid, process of. Ribs, 11th. do. 10th. Clavicle, right side. do. both. Humerus, upper third, oblique. do. Forearm, radius and ulnar. Ulnar and radius. Ulnar Ulnar. Radius. Femur, neck of. do. do. Tibia, (internal maclulus). do. do. do. refracture of. do. compound comminuted. Fibula. do. Miscellaneous fractures. Skull, death occurred in forty-eight hours. Leg and ankle, compound comminuted, amputated. Leg, both, compound comminuted, death occurring in six hours. Leg and arm, compound; died in twenty-four hours. Thigh, compound comminuted, amputation; died in twenty-four hours.

Of the two cases of fracture of the neck of the thigh, one remained in hospital seven weeks, the other eight weeks.

The result in one case is not known; there was shortening in the other of two and a half inches. This patient had been under treatment for three weeks prior to his coming to the hospital. Both extension and counter-extension were employed. The ages of these two patients respectively were 34 and 64 years. Thomas, aged 34 years, whose leg was shortened two and half inches, received his injury from a direct blow. He was somewhat broken down in health by previous rheumatism.

One case of fractured clavicle was treated by the method recently advised by Dr. Moore, of Rochester, but I am sorry to say with no better result than the others treated by adhesive straps alone.

Two cases of fracture of internal malleolus were treated without splints, there was no displacement; therefore refrigerating lotions, alternating with fomentations, were employed for a few days until inflammation was subdued, when a simple roller was applied around the foot and leg. In one case a bad form of erysipelas supervened, which terminated in recovery. In the other case the result was perfect.

The simpliest appliances were used in all the other fractures, both of the arm, fore-arm and leg, and the apparatus removed in from fifteen to thirty days, the result being perfect in all the cases, save those known on their entrance to hospital to be so severe and complicated that deformity was inevitable.

One case of compound comminuted fracture of both legs terminated fatally in six hours from shock of injury.

One case of comminuted fracture of tibia, necessitated removal of a portion of tibia three inches long. The patient recovered with a good result.

One of the fatal cases was complicated by a burn from a gas well. In a fit of delirium he got out of bed, fell over the banisters, breaking his thigh at its lower third. The upper fragment projected beyond the integrements three inches, which was sawn off by the chain saw, the fractured bones then were properly adjusted, but the patient only survived the double shock from burn and fracture a couple of days.

In a case of fractured fibula, as there was no displacement, no splints were made use of. The patient placed in bed for two weeks and ordered to keep quiet; result perfect.

An instance, showing the importance of rest and quietude, occurred in the person of one who was injured upon the railroad. He had but a single rib broken, one of the fractured extremities inclined greatly to protrude. A compress and adhesive bandage were used, and the patient seemed progressing as well as any one could with such injury. In three or four days he determined to get up and go home to Canada to his friends. He left under protest, never obtaining the assent of either the attending or house surgeon to leave, but self-willed as he was, he left and died before he reached his friends in Canada, probably within forty-eight hours after leaving the hospital.

I regret that dextrine, so much used in the Massachusetts General Hospital for the treatment of fractures, has never been introduced here. From what I know of it I am convinced of its great superiority over many other forms of dressing.

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ART. III.—*On the Recent Advances in the Theory of Vision.* By H. HELMBOLTZ, *(of the Royal Society of London.)*

Translated from *Les Annales d'Oculistique*, BY F. W. ABBOTT, M. D.

The natural sciences and psychology, these two important branches of human knowledge, are found intermingled when we study the physiology of the senses. From this union result problems which interest equally the naturalist and the psychologist, and to the solution of which both must necessarily contribute' At first sight physiology appears to have to deal only with the material changes occurring in the bodily organs; the physiology of the senses ought, indeed, to consider in the first place nerves and their sensations, in so far as the latter are the result of irritation of the nerves. But when we examine the functions of organs, can we dispense with the study of the perceptions of external objects which are caused by nervous irritations? A sufficient motive to undertake this study is the fact that a perception often discloses a nervous irritation, or the modification of an irritation, which we would not otherwise have noticed. But the perceptions of external objects is unquestionably a conscious act of our faculty of representation; it is a *psychical* act. Moreover with the progress of the study of the perceptions we have seen a constant increase in the domain of these acts whose influence is perceived in the most elementary sensual perceptions. If these psychical acts have been studied but little hitherto it is because we have been accustomed to consider the perception of an external object as something furnished immediately by the sense and insusceptible of analysis.

It is scarcely necessary to refer here to the fundamental importance which these studies present relatively to almost all the other branches of science. Sensual perception is found, in fact, directly or indirectly at the base of every human cognizance, or conduces, at least occasionally, for the development of the diverse aptitudes of the human mind. It is the corner stone of all the relations between man and the external world, and the psychical functions which accompany these relations, even of the lowest and most simple order, are none the less important and worthy of interest. It is in this study that the art of experimenting, so improved by the study of the natural sciences, has been able to penetrate for the first time into the domain of the psychical functions. It is true that experiment can here be applied only to define the kind of sensual impressions which produce in us such or such a representation, but this research suffices us to draw numerous consequences as to the nature of the psychical processes which are found in connection, and it is in this sense that I wish to try to give an account of the results which have been given by recent researches concerning the physiological theory of vision.

Having just finished a complete work on Physiological Optics* I willingly profit by the occasion which is offered me to present in their connection (ensemble) the theoretical considerations of which I have just spoken. In the course of my work I have taken care to verify myself all the facts and all the experiments of any importance. We are, moreover, nearly at accord upon all the considerable experimental facts; there is scarcely any dispute except upon the value of certain individual differences which are presented in certain classes of perceptions. The remarkable progress which ophthalmology has made in the last few years has led many distinguished savans to study the physiology of vision, and in proportion as the quantity of facts has multiplied, it has become more easy to arrrange them and to form of them a satisfactory whole. Competent readers know, however, how much work is necessary to establish a great part of the most simple and apparently most incontestable facts.

In order to put this subject in a clear light it will be necessary, first, to define the physical functions of the eye considered as an optical instrument. We will next explain the physiological phenomena of irritation and transmission, of which the parts of the nervous system which pertain to the eye are the seat. In the last place we will examine the psychological question, how perceptions are the consequence of nervous irritations.

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* Physiological Optics, by H. Helmholtz, Ninth volume of the General Encyclopedia of Physics, by G. Karstein, Leipsic, 1867.

In the first part, which we cannot omit because it forms the basis of the rest, we shall doubtless find many things already generally known; it is necessary to repeat them, to be able to put the new facts in their proper place. This part of physics is also full of interest; upon it rests the extraordinary development which ophthalmology has taken in the past twenty years, a development which is perhaps without example in the history of medicine for its rapidity and its eminently scientific character. The philanthropist is not alone in rejoicing at its conquests, which prevent or cure so many ills in the presence of which we were so lately powerless; the friend of science has every reason to regard it with a proud eye. We must not deceive ourselves. It is not by groping or by chance that such progress has been made, but rather by an advance whose rigorous method is a guaranty of success. As of old, astronomy, by its example, gave to the physical sciences confidence in the true method, so at present, ophthalmology shows, in a striking manner, the progress which can be made in therapeutics by the application of proper methods of research, and by a knowledge of the causes of phenomena. It is not surprising that a field where a scientific spirit may promise itself such noble triumphs should have attracted capable workers; it is in great part due to their number that this development has been made with such surprising rapidity. I may be permitted to name for Germany, Holland, and England, Messers. Albert Von Graefe, of Berlin, Donders, of Utrecht, and Bowman, of London. Those who love Science for herself may cite here the profound verse of Schiller, "Let him who aspires to the favors of the Goddess seek not in her the woman." It is easy, in truth, to show that, in the subject which occupies us, the most important practical results have been the unexpected consequence of researches which a superficial spirit would have considered superfluous trifles; these studies, however, unfolded a succession of causes and effects, whose interest was at first appreciable only in a theoretical point of view.

I.

THE EYE CONSIDERED AS AN OPTICAL INSTRUMENT.

Among all the senses, vision has always been considered the most precious gift, and the most marvellous product of nature. Sung by poets, celebrated by orators, the eye has been praised by philosophers as showing the limits of what organic nature is capable of producing, and physicists have striven to imitate the organ which they considered the ideal of optical instruments. The enthusiastic admiration of which this organ has always been the object is easily appreciated, when we think of the services which it renders us. The eye reaches to the limits of space; with a marvellous rapidity, the most variously colored images paint upon it a thousand changing pictures, and the representations which it furnishes form a spectacle of which we can never become weary. It is by the eye alone that we become acquainted with the depths of space, and the innumerable and luminous worlds by which it is peopled; it is the eye alone which enables us to admire terrestrial landscapes, with their harmonious changes of light and shade, the plants so varied in form and color, the animals with their movements so full of grace and power. Next to the loss of life, the loss of sight appears to us the most terrible of all.

The precision and certainty with which vision enables us to appreciate the position, the distance, and the size of the objects which surround us, are of much greater importance than the esthetic joys for which we are indebted to the eye. In truth, the appreciations furnished by the vision guide man in all his movements; they are as indispensable to the seamstress whose fine needle finds its way through the midst of the most complicated labarynth of threads, as to the chamois hunter, whose life depends upon the just estimation of the chasm across which he must leap. On the other hand, the success of our movements, which are founded essentially upon the notions which vision gives us of the external world, serves as a perpetual test of the accuracy of these notions. If vision deceived us as to the position and distance of objects, we could not fail to perceive it immediately, because we should put our hand or foot upon the places where we thought we saw the objects which we wished to touch. This continual verification of the exactness of the teachings of vision, which is made by our movements, is what leads us to so full and entire confidence in the testimony of this sense, a confidence which no objection proposed by philosophy or psychology will be able to disturb in the slightest degree. Since this is so, is it astonishing that the eye has been considered as an optical instrument with which none of those which man constructs can vie in perfection? Is it not natural that we should have thought that we could explain, by the precision and the complication of its structure, the exactness and the variety of the functions with which it is endowed?

However, the exact study of ocular optics, such study as has been made the past ten years, has disclosed a remarkable deception in regard to the optical faculties of the eye; a deception which the criticism of facts has inflicted on more than one inconsiderate enthusiasm. But here, as in other analagous cases, it appears to me that a more complete understanding of the facts, instead of destroying enthusiasm, only increases it by justifying it. In truth, the eminent services which this little organ renders, cannot be contested; and if, in a certain sense we are obliged to abate our admiration, we find at once a sufficient compensation in other and unexpected marvels.

Be that as it may, we can imitate none of nature's works; if human art produces optical instruments attaining, as such, a higher degree of perfection than the eye, the instrument which nature has here fashioned is not less marvellous than any other of her works.

Considered as an optical instrument, the eye is a camera obscura Every one is acquainted with this apparatus, which photographers use in taking portraits or landscapes. A box, blackened inside, has, in front, certain lenses which refract the light and re-unite it in such a manner as to form, at the posterior part of the box, a picture of the objects situated before the instrument. At first, when he adjusts the focus, the artist receives the image on a ground glass. Upon this screen the image appears inverted; it presents a natural coloring and its contours are of an elegance and sharpness which defy the imitation of the most skillful artist. Then he replaces the ground glass with a prepared plate, upon which light produces certain chemical changes; stronger at the most illuminated points, weaker at the shaded points. These changes produce the daguerrean or photographic image.

The natural camera obscura of our eye is likewise blackened internally. The cuboidal box of wood is replaced by a rounded shell, the *sclerotic.* This tough, white membrane, a part of which is visible in the living, constitutes the white of the eye. The inner surface of the sclerotic is covered by the *choroid,* a thin membrane formed almost entirely of red, interlacing blood vessels and covered with black pigment. The empty space of the camera obscura of the photographer is filled in the eye with a transparent mass clear as water. At the anterior part of the eye, in place of the glass lenses of the camera obscura, the *cornea,* formed of a transparent cartilaginous substance and presenting a spherical convexity, is inserted into the sclerotic. Its position and curvature are unalterable, because it forms part of the external envelope of the eye. The photographer's lenses are not fixed; they are mounted in a sliding tube which the operator moves by means of a rack and pinion, so as to obtain clear images on the ground glass, whatever may be the distance of the object which he wishes to reproduce. The lenses must be moved farther from the ground glass, in proportion as the object to be represented is nearer to the apparatus. As it is necessary that the eye should receive upon its posterior surface clear images of objects at different distances, this organ must likewise contain a moveable part. This role is played by the *crystalline lens* which, situated a little back from the cornea, is almost entirely covered by the colored iris. Behind the circular aperture of the iris, which is called the *pupil,* the lens is uncovered, and the border of the pupil rests upon its anterior surface. Nevertheless, on account of its extreme transparency, the lens is not visible under ordinary conditions of illumination; we perceive habitually only the black fundus of the eye. The crystalline is a soft elastic body, very transparent, and convex upon both surfaces. At its circumference it is supported by a ligament, fluted like a lady's collar, the *Zonule of Zinn,* whose tension may be diminished by the *ciliary muscle,* a circular muscle whose insertion is fixed near the cornea. When the ciliary muscle contracts, the traction exerted upon the periphery of the lens being lessened, this lens can return upon itself by reason of its own elasticity, and the convexity of its surfaces increases. There results from this an increase of refracting power, and the eye becomes capable of tracing upon its posterior surface the image of nearer objects.

The normal eye in a state of repose sees distinctly distant objects; the tension of the ciliary muscle accommodates it for near objects. The mechanism of the accommodation, which I have just sketched, has been since the time of Kepler one of the greatest enigmas of opthalmology; the question was at the same time of great practical importance, on account of the numerous pathological imperfections of accommodation. There exists no other question in optics upon which so many contradictory theories have been built. The first step towards its solution is due to the English oculist Sanson, in whom we must recognize the merit of remarkable keenness of observation, on account of the discovery which he made, in the pupil, of feeble luminous reflections formed by the two surfaces of the lens. This phenomenon, insignificant in appearance and scarcely perceptible, was only visible in a dark place, with a bright light at one side, and with the observor standing in a particular place. These little images of Sanson were destined to shed great light upon an obscure part of science. They are in truth the first sign by which the presence of the lens in a living eye could be recognized. Sanson immediately employed these reflections in order to determine objectively whether the lens were in place in the diseased eye. Max Langenbeck first noticed the changes which these reflections undergo during accommodation. This discovery was utilized simultaneously by Cramer, of Utrecht, and by the author to determine exactly all the changes of the lens during accommodation. There is an instrument, called a heliometer, which astronomers employ to measure the small distances between the stars, in spite of the mobility of the heavens. I applied the principle of this heliometer to the measurement of the eye in motion. The ophthalmometer, constructed for this purpose, serves to measure, on the living eye, the curvature of the cornea, the curvature of the two surfaces of the lens and the distance between these two surfaces &c., with more exactness than we have been able to do it up to the present time, upon the dead eye, which permit us to measure the changes which the optical apparatus undergoes during accommodation.

From that time the question was settled from a physiological point of view. To these researches were added those of Oculists, especially Donders, upon the individual defects of accommodation, which had been called in general *myopia* and *presbyopia.* It was necessary to institute methods of determining with precision the power of accommodation of the least experienced and most ignorant patients. He discovered that under the names of *myopia* and *presbyopia* very different conditions had been confounded and this had rendered the choice of spectacles very uncertain. Certain very obstinate diseases, which had been considered nervous affections for lack of knowing how to account for them, were very easily explained by the existence of certain defects in the apparatus of accommodation, and yielded rapidly to the employment of suitable glasses. Donders has shown also that strabismus is usually the consequence of defects of accommodation, while Von Graefe had already demonstrated that myopia, neglected and becoming progressive, might cause distensions and hurtful deformities of the fundus oculi.

Thus science, by unexpectedly linking together the chain of causes and effects, has produced results as useful for the diseased, as interesting for physiologists.

It remains for us to speak of the screen which receives the optical image which is formed in the eye; this is the retina, the thin, membranous continuation of the optic nerve, which forms the innermost layer of the membranes which line the ocular globe. The optic nerve is a cylindrical bundle, formed of very fine nerve fibres, held together and protected by a very tough tendinous sheath. It penetrates the eye ball at its posterior part and a little to the nasal side. From this point of entrance the fibres of the optic nerve expand, radiating to all parts of the anterior surface of the retina. The extremities of these fibres have a singular formation; there are at first cells and nuclei analagous to those which are found in the gray matter of the brain; then, at the posterior surface of the retina, and forming the extremity of the nervous conduit, is a regular mosaic composed of fine cylindrical *rods*, and larger, flask-shaped formations, which are called *cones.* All these elements are crowded one against another and situated perpendicularly to the surface of the retina; the rods communicate with the smallest nerve fibres, the cones with the larger ones. Positive experiments show that this mosaic of rods and cones is that layer of the retina in which luminous sensibility resides, that is to say, this layer of the retina is the only one where the action of light can produce a nervous excitation.

The retina presents a remarkable spot situated a little to its temporal side and not exactly in the middle, as one might suppose. This place, by reason of its color, is called the *yellow spot* (*macula lutea*); the retina presents here a slight increase in thickness. A little depression (*fovea centralis*) occupies the centre of this spot; the membrane is very thin at this point because its composition is reduced to the elements indispensable to exact vision. The cones which constitute the regular and close mosaic, with which the little depression is lined are here finer (1-100 of a millimetre in diameter) than in the other parts. The other and more or less imperfectly transparent retinal elements are here wanting, except the nuclei belonging to the cones, and the fibres necessary for the union of the cones with the rest of the nervous apparatus. The retinal vessels do not penetrate the *fovea centralis*; their terminations surround this dimple with a crown of very fine and delicate capillary loops.

The *fovea centralis* is of very great importance in vision, because this is the spot of the most exact perception of distances. It is here that the cones, the terminal sensitive elements, are pressed most closely together. We can assume that each one of them possesses its nerve fibre which, through the medium of the optic nerve, goes separately to the brain, there to give the impression which has been received, and that there the excitation of each one of these cones may occasion an isolated sensation.

The formation of optical images in a camera obscura rests upon the fact that all the rays which proceed from one luminous point and enter the apparatus undergo, in their passage through the lenses, such a refraction that they all unite again at one single point. Every converging lens produces the same effect. Let us allow the rays of the sun to fall on a converging lens, and hold a sheet of white paper at a suitable distance behind it. There are then two things to be noticed; in the first place, and we usually forget to mention this, the lens casts a shadow as though it were an opaque body, rather than composed of transparent glass; in the second place, in the centre of this shadow is seen a dazzling spot, it is the image of the sun. On account of the refraction in the glass, the light which would have illuminated the whole surface, if we had not interposed the lens which casts upon it its shadow, is reunited at the shining spot which is occupied by the little image of the sun. Instead of this luminary let us choose a luminous source *without appreciable dimensions*, such as the star Sirius; the light then unites in a *point* at the focus of the lens. At this place the paper is illuminated, so that the image of the star is given by an illuminated point of the paper. The light of a second fixed star, near the first, would concentrate to a second point of the paper; this point being illuminated would furnish therefore the image of the second star. If the light of this star is red, the point illuminated by this light would evidently appear red. If there are several stars in the neighborhood, each one would have its image on a different point of the paper, and each image would show the color of the corresponding star. Finally, if, in place of isolated luminous points like stars, we have a succession of shining points constituting a line or a luminous surface, to this object would still correspond a succession of luminous points upon the paper; here still, *all* the light coming from one single point is concentrated again in *one single point* of the paper, provided that this screen is at the proper distance. Each point of the paper is illuminated with the intensity and the color belonging to it, and receives none of the light emitted by the points of the object to which it does not correspond. Let us substitute for our screen a sensitive photographic plate; the prepared surface undergoes, throughout, changes from the effect of the light which reaches it. But, of the light which enters the instrument, each point of the sensitive surface receives *all* that and *none but* that which proceeds from the corresponding point of the object, and, consequently, is illuminated with an intensity proportional to that of the object. The value of the change produced upon the sensitive plate is, therefore, everywhere in proportion to the chemical intensity of the light of the corresponding parts of the object.

Now it is precisely the same with the eye; only the glass lenses are replaced by the cornea ; and the crystalline, the screen or sensitive plate, by the retina. When a distinct optical image is formed upon the retina, each cone of this membrane receives exclusively the light which proceeds from a superficial element that is very small compared to the field of vision ; the nervous fibre of each cone is excited by the light from this corresponding element only, and does not feel any other, while the light of the other points of the field of vision excites other fibres.

It is in this way that the light of each point of the field of vision produces an isolated sensation, that the equal or different intensity of the various points of the field of vision may be distinguished and separated in the sensation, and that these different impressions may be perceived separately.

When the eye is compared with any optical instrument whatever, we are struck first of all with its great superiority in extent of field of vision. Each eye embraces from right to left nearly two right angles (160° from right to left and 120° up and down) and both together embrace more than two right angles in the horizontal sense. The field of vision of our artificial instruments is generally very small, smaller, indeed, in proportion to the increase in the magnifying power. But it should be remarked that we exact of the instrument a perfect accuracy of the image throughout its whole extent, while the retinal image needs great distinctness only for the little space occupied by the yellow spot. The diameter of the *fovea* corresponds to about one degree in the field of vision, that is to the surface covered by the nail of the index finger when the arm is fully extended. In this small portion of the field of vision the perception is sufficiently exact to enable us to distinguish two points a minute apart, the sixtieth part of the size of the nail held as before stated. This distance corresponds to the breadth of a cone of the retina. All the other parts of the retinal image are seen with less distinctness and so much the more as we approach the limits of the retina. The image received by the eye is therefore comparable to a drawing whose centre is very finely finished while the rest is only roughly sketched. If we see distinctly at one time only a very small portion of that which surrounds us, as a compensation, an advantage which no optical instrument presents, the eye enables us to take in a very large expanse of space with sufficient clearness to prevent remarkable objects, and still less the changes which may occur in the field of vision, from escaping our notice. But if the objects are too small we cease to be able to distinguish them with the lateral parts of the retina. The sky lark which we hear singing "lost in the blue of space" (Goethe) is, in truth, lost for us so long as we do not succeed in bringing its image upon the *fovea*; but then we can perceive it.

[TO BE CONTINUED.]

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ART. IV.—*Periodical Headache. A New Method of Curative Treatment.* BY F. BRADNACK, M. D.

Inasmuch as even so high an authority as Professor Austin Flint, declares it necessary to place the affection known as "periodical headache" in the (medically speaking,) unpleasing category denominated *opprobia medicorum*, no apology will be needed from any laborer in the ranks of the profession, who can demonstrate his ability to throw even one ray of light upon the therapeutics of this most distressing malady. And, inasmuch as persistent and perpetual progress is one of the proudest boasts of our blessed art, I shall venture, without any further preface, to detail some of my experience in the treatment of this affection, in the hope of demonstrating the truth of the proposition that periodical headache can now be generally, if not invariably, driven from its hitherto safe retreat in the *opprobia medicorum*, and compelled, at least, in most instances, to succumb to the scientific application of improved therapeutics.

In Dr. Flint's work on "The Principles and Practice of Medicine," under the head of *Cephalagia*, page 694, are the following words: "Periodical headache, as regards successful treatment, belongs among the opprobia of the medical art; yet, in not a few cases, much benefit may be derived from treatment." In quoting from Dr. Flint the above sentence, in connection with a proposed improved method of therapeutics in this malady; it seems to be a duty, while it is, at the same time, a pleasure to remark that, than myself, no one can hold in higher estimation Dr. Flint's professional abilities, or entertain for his opinions a greater respect.

I believe that one prime reason why we have hitherto been unsuccessful in the treatment of periodical headache, relates to diagnosis; for my experience in a number of cases leads me to infer that the pathological condition in this malady is, if not always, *almost* always the same. At the risk of creating some surprise, I shall venture the assertion, (believing that future accurate observation will verify it,) that this pathological condition is *congestion*; sometimes active, that is, arterial, and, sometimes passive, or venous congestion; though, probably, in most cases, a combination of both these forms; the arterial form usually predominating. In other words, the trouble is mechanical; the pain and distress being the natural result of pressure upon the brain substance, occasioned by abnormal distension of the cerebral blood-vessels.

That this pathological condition in the eight or nine cases of periodical headache I have recently treated, has not been conjectural, the following facts will prove. In each case there have been, more or less marked, the following signs and symptoms: 1. Throbbing of the carotid and temporal arteries; 2. Congestion of the eyes, in some cases occasioning coryza; 3. A sensation on the part of the patient of intense intracranial tension, described popularly by saying that the head "feels as if it would burst"; 4. Redness of part of, or of the entire face; 5. A partial loss of the power of co-ordinating muscular movements, occasioned, I conjecture, by extreme vascular pressure upon the cerebellum; 6. Occasional vomiting; 7. *tinnitus aurium*, often very violent. These are the symptoms and signs I find invariably present; and on which I base the assertion that cerebral conjestion is the almost invariable cause of these headaches. From these it will be seen that the diagnosis is, so far, not based on theory, but on facts, which, as we all know, are stubborn things. But, aside from these positive signs and symptoms, I find many others present in greater or less degree, some of which go, either negatively or indirectly to substantiate the position advanced. Among these are: 1. Anorexia; 2. Muscæ volitantes, occasioned doubtless by congestion of the retinæ; 3. Extreme coldness of the extremities; 4. Often a decrease of heat, as indicated by the thermometer, of large portions of the cutaneous surface, indicating a retreat of the blood inwards *somewhere*; 4. Numbness and partial temporary paralysis of the upper extremities, caused, unquestionably, by intracranial pressure; 5. Difficult respiration, amounting in some instances to dyspnœa. This latter symptom, taken in connection with the fact of the existence of abnormal heat in the upper portion of the cervical spine, and lower external regions of the occipital bones, appear to me to indicate, in common with the adjacent and superjacent congestion, an abnormal pressure on the medulla oblongata, implicating the origins of the pneumogastric and spinal accessory nerves.

If, in many other diseases, we were in possession of half as many positive and negative symptoms, should we not be confident of our diagnosis? Believing that an affirmative answer will be generally accorded to this question, we next pass to briefly consider the question of the causation of the malady under discussion. To arrive at positive conclusions on this head appears to me to be by no means so easy a task as in the case of the diagnosis. Yet in many cases, the probable causative influences may be elucidated with much certainty. They may be divided into predisposing and exciting causes. In regard to the predisposing causes, that hereditary influences have frequently considerable to do with the production of this disease, would seem to be probable, both theoretically, and upon clinical evidence. We know the power of hereditary influences in other neurotic affections; for instance, epilepsy and hysteria. We also know that the existence of one specific nervous disease in the parent or parents, frequently seems to prepare the way for, or to eventuate in, a different nervous disease in the child. Indeed, it is not reasonable to suppose that any nervous lesion, or any persistent abnormal condition of the general nervous system of a parent, (for instance, chronic alcholism, or progressive locomotor ataxy,) will be quite likely to have some influence upon the offspring. This is not asserting that the children of parents affected with epilepsy, must necessarily be epileptics; or, that the existence of a specific nervous lesion in a parent necessarily results in the production of the same specific disease in the child, but merely, that the existence of serious permanent nervous lesions in the parent, tend in some manner to influence the nervous system of the offspring; perhaps only to the extent of rendering it more vulnerable to disease. To allow the possibility of the latter effect, is amply sufficient for the argument. Next, the exciting causes. Given the predisposition strongly marked, it is hardly an exaggeration to say that almost anything may act as an exciting cause of these headaches. The exciting causes are, to use a popular expression, almost too numerous to mention. Prominent among them, however, in my existence are the following: Mental emotions; excessive brain work; ingestion of improper food, or, of too large a quantity of proper food; cold; heat; constipation, (especially a loaded condition of the rectum;) abuse of stimulants, as alcohol and tobacco; the improper use of opium; and so on. In the female they may be amenorrhœ, dysmenorrhea, uterine or ovarian irritation; uterine displacements, especially retroflexion or retroversion of the uterus, by reason of their pressure on the rectum, thereby causing obstipation, or inducing constipation of the bowels.

I have observed, that in every case of periodical headache I have treated, or with the history of which I have become acquainted, without one exception; constipation, often chronic prevailed, which leads me to remark, that in some unexplained manner, the pressure exerted upon the rectal nerves by a fecal cylinder, appears invariably to aggravate these headaches, and doubtless, frequently acts as a causative influence.

Inasmuch as one of the specific effects of alcohol is to induce cerebral congestion, it is manifest that an excessive use of this article must, of necessity tend to excite the affection in question. That it does so excite it, is, I believe, provable by irrefragable evidence. This remark will, of course, apply with increased force to the use of opium. That the phenomena of cerebral congestion and anœmia are regulated by the vaso-motor nerves, recent histological researches appear to have demonstrated. If this be really so, we have here a key to many mysteries; for, if it be, as it undoubtedly is, a fact that certain drugs have the power to affect these nerves, and thereby either to dilate or constringe the arteries to which they are distributed, we find ourselves furnished with indications of the highest importance as to treatment, if not with a perfect therapeutical key.

But, after we have enumerated all the known exciting causes of this disease, we shall often find ourselves quite in the dark, both as to the pathology and treatment, if we fail to allow for, in at least many instances, an *occult, subtle and inexplicable constitutional* *tendency* to this malady, which can no more be explained or accounted for, than can the phenomenon of menstruation, or the existence of individual idiosyncrasies. Time spent in an endeavor to discover and elucidate the nature of this tendency, would probably prove to be as effectually wasted, as if spent in the mathematical endeavor to trisect an angle. It is sufficient for practical purposes to take this tendency into account, and to allow for it.

It will be seen from Dr. Flint's above quoted statement, that the prognosis of periodical headache, has hitherto been exceedingly unfavorable as regards any method of permanent relief; which remark brings us to the question of treatment.

Having, I trust, as hearty a disbelief in, and dislike of most so-called specific plans of treatment, (believing it to be usually quite impossible to lay down any specific or invariable treatment for disease,) I nevertheless venture the statement, that, for periodical congestive cephalalgia we may employ a method of treatment, which, if not specific aproximates, so nearly to a specific character, as to, in many instances, honestly deserve the appellation. I am aware this is a strong statement, but I am, (I trust not unreasonably) so confident of its truth, as to be anxious to subject it to the *experimentum crucis* of actual test, in the faith that when weighed in scientific balances, it will not be found wanting.

The treatment of this malady, divides itself naturally into two parts; first, that proper during the attack; second, that appropriate in the internal. I believe we possess remedies capable, in most instances, of entirely, or nearly entirely, allaying the pain during the attack; and others administered during the intervals of effecting in a few months a permanent cure. To say that I have wholly originated this method would be to make a strong claim; but, that it has never in this disease been systematically employed before, I am certain.

In the proposed treatment of this disease, we, of course, adhere to general principles. If there exist complications, whether or no they assumed to act as exciting causes, they should be removed, or so far as possible, paliated. If there be constipation, the usual treatment for constipation is indicated. If examination reveals the existence of a uterine displacement, it should be remedied. If tobaccos are used in excess, they must be either discontinued or used in moderation. Suppose the treatment to be commenced the day after an attack of headache. Assuming the non-existence of any important physical lesion, I find it advantageous, provided there are no contraindications, to begin by the administration at night, one or two of the following pills, which, during the entire course of treatment (say six months) may be given once in three weeks;

℞ Mass hyd.
Ext. coloc. com.
Pulv. aloes soc. a a, ℈ j.
Pulv. ipecac. gr. vj.
M. Ft. pil., no. xij.

This pill to be followed in the morning by one (1) drachm of sulphate of magnesia.

As a permanent medicine, I then prescribe three (3) drops of liquor potassæ arsenitis, to be taken in one (1) drachm of water after each meal, for certainly three, and usually six months its use being suspended one day every three weeks when the above pill is taken.

If the patient be delicate, and complains much of coldness of the extremities during the attacks, and frequent chilliness during the intervals, the following prescription is substituted for the liquor potassæ arsenitis:

℞ Liq. arsenicalis hydrochlorici, ʒ ss.
Quiniæ disulphat. gr. xij.
Liq. ferri perchloridi, ʒij.
M. Aquæ, f ʒ vj.

(*S.* One tablespoonful in a wine-glassful of water, twice a day, after meals.)

When an attack of headache begins, I adopt the following plan, with minor modifications according to existing circumstances and complications. I direct the patient to sit in an easy chair, (avoiding the recumbent position, as tending to cerebral congestion by means of gravitation,) and to place his, or her feet in a hot bath of mustardized water, the hands also in a similar hot bath, minus the mustard; and if it can be tolerated, (though females frequently can not tolerate it,) a bag of pounded ice to be placed upon the head, covering as much as possible of the occipital region, and thereby bringing a decongestive influence to bear upon the cerebellum and the medulla oblongata. These accessory measures to be followed by a dose of the following medicine:

℞ Potassii bromid. ʒ vj.
Ammon. bromid. ʒ ij.
Potassii iodidi, gr. vj.
M. Infus columbæ, f ℥ iiij.

S. One dessert-spoonful in an ounce of water.

One or two doses of this prescription will usually suffice either to very greatly palliate, or else entirely relieve the most distressing and agonizing headache, provided only it belongs to the class under consideration. But, to produce its best effects, this remedy should be administered as early as possible after the commencement of the attack. In some cases patients experience prodromic symptoms. When these occur, the threatened attack may often be rendered abortive by the timely administration of the medicine.

As it has been frequently demonstrated by Professor W. A. Hammond, of New York, that the bromide of potassium possesses the power of decreasing the amount of blood in the skull, I, of course, claim no originality in using that remedy in this connection, in which the chief pathological condition is cerebral congestion. But in combining with this drug the bromide of ammonium, and a small amount of iodide of potassium, and in exhibiting the combination in a little infusion, (the infusion of colombo,) I claim originality. That the above formula constitutes altogether the most eligible manner of combining these articles into a weapon of offense against the disease, I feel convinced by repeated trials of it.

In this plan of treatment, the prescription containing the bromides is given just before, or during an attack, with the object of reducing the cerebral congestion, and thereby allaying the paroxysm of headache. That it is capable of doing this, I am satisfied by ocular evidence, as well as by asservations of patients. I am at the present time treating a lady who reports herself as invariably relieved of an attack of headache by the use of the above prescription alone, after having suffered these attacks for eleven years, and being treated by numerous physicians, without receiving a particle of benefit.

The prescription containing arsenic, or the simple liquor potassæ arsenitis, is given with the object of changing, or overcoming the subtle constitutional tendency to these headaches, previously alluded to. In my hands it produces this affect, whether it do so through the medium of the vaso-motor nerves, or by a general tonic health-producing impression on the entire nervous system, or upon the sympathetic nerve, I am, of course, unable to say; but, that it effects after a few months a permanent cure of the disease, I am able to assert, in at least a certain number of instances, sufficient to induce me to believe, that if scientifically administered, and faithfully persevered in for six or seven months, it will in the vast majority of cases prove successful in the hands of the scientific practitioner.

Without undertaking to explain the exact action of arsenic, I cannot but believe from my observations of its action in this disease that it must exert a decongestive influence upon the entire encephalon. I would venture the conjecture that it may exert *permanently* the same decongestive action upon the brain, and upper portion of the spinal marrow, that the bromide of potassium exerts temporarily. If this be so, we have a sufficient explanation of its efficacy in the disease under consideration.

In conclusion, if it shall be possible by what has here been said to contribute even an iota towards the relief of this distressing, and hitherto nearly incurable malady, the knowledge of having so contributed will constitute for the writer a most ample reward.

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ART. V.—*A Case of Ovariotomy.* *By* J. S. DOLSON, M. D.

Mrs. William Phillips, of Thurston, County of Steuben, 32 years old, married, the mother of three children, oldest thirteen, youngest four, and having six sisters and three brothers, all well; father and mother living; no hereditary disease that I could learn in the family; came under my care on the 19th day of Nov., 1871. Was in the enjoyment of good health up to about one and a half years before, and then weighed one hundred and fifteen lbs.

First discovered that the abdomen was enlarging over a year ago; menstruation regular, but somewhat less in quantity than formerly; sleeps well when the head is raised and on her side; cannot lie on her back; respiration hurried; pulse one hundred and twenty; bowels constipated; measures around body at the umbilicus forty-three inches; uterus not enlarged or displaced. I informed patient that she had an ovarian tumor, and that it was probably multilocular. As she had taken no medicine with a view to correct the growth, I advised a careful trial of the iodide of potash internally, and the application of an ointment of iodine and iodide of potash externally, saying should the treatment fail to arrest the growth it might become necessary to remove it. I visited her twice before the operation at intervals of ten days and found that she was rapidly losing flesh and strength and that the respiration was vastly worse. After detailing to her and her husband the dangers and risks of an operation, as well as I was able, and leaving them to decide what should be done, I was told by the patient she wanted even the slender chance of recovery that the operation offered.

January 8, 1872, in presence of Drs. Green, Trumbull, May and Winie, after putting patient under the influence of chloroform, I made an incision from the umbilicus to near the pubis in the linea alba, bringing tumor into view. Tapped it with a large sized trocar, with hose attached, and succeeded in removing ten lbs. of fluid. As the growth was still too large to remove through my first incision, I enlarged it upwards about two inches above the umbilicus, and after having broken down extensive adhesions with my hands, removed the mass, weighing, with the fluid previously drawn off, fifty-one lbs. The growth was largely filled with albuminous fluid of a great variety of hues, and was contained in great numbers of cysts, or what seems to me a more correct expression, compartments of different sizes, the largest one being at the upper part and in contact with the diaphram. I applied clamp and separated the pedicle with actual cautery, loosened clamp in a few moments, and, as there was still bleeding, transfixed pedicle with needle armed with double ligature, tied each part, cutting ligature close and dropped whole into abdomen. Approximated edges of wound by means of interupted sutures and straps. Applied a many tailed flannel bandage and lifted patient into bed. No stimulants were given until the operation was completed. Staid with patient about six hours; reaction has come on, patient comfortable.

Visited patient on Wednesday following operation; no vomiting and no upleasant symptoms; is taking solid opium in pill in quantities sufficient to relieve pain and produce sleep; has only a tablespoonful of milk once in two hours, and bits of ice to suck to relieve thirst.

Hornellsville, Jan. 11, 1872.

ART. VI.—*Abcess of Temporal Region from Gunshot Injury:—Extraction of ball after Four Years Lodgment Behind Zygomatic Arch. By* J. W. SOUTHWORTH, M. D. *Toledo, O.*

Mr. G. W. E.—mulatto—aged 28, of stout build, was struck by a partially spent ball or balls (?) in the temple, while serving in the late war,—on the 7th of June, 1864. Says the hospital surgeon told him a ball was found and taken out. "Wound did not heal until after a piece of bone came out." Cicatrix was always tender, and he was troubled with some headache. In the summer of 1865 had increase of pain and throbbing, with vertigo after stooping, eventuating in an abcess which was opened and treated in the usual manner by his attendant. It healed soon. Cicatrix still tender. Headache and vertigo not very troublesome, until the summer of 1866, when another abcess formed in same situation; was treated as usual by another practitioner. The abcess again healing entirely—(cicatrix was still tender] and remained so until June, 1868. The patient having in the meantime more or less throbbing headache during the hot season when working in the sun. Frequent applications of cold water releived it and the vertigo as well.

On June 8th, 1868, he applied to me (at Adrian, Mich.) giving previous history as stated, All the premonitory symptoms of an abcess being present, viz: tenderness, throbbing pain and slight swelling, and fever. He was treated with a brisk cathartic of calomel, podophylin and nitre, with a mixture of veratrum, antimony and dovers powder to control febrile action, and bowels kept open with a saline draught at night. All the symptoms increased in violence—vision impaired on affected side, severe pain on moving lower jaw; intense throbbing pain in temple and swelling increased, with œdema. Made an incision at the most prominent point on the 10th, but no pus followed. Constitutional and local symptoms abated on the evening of the 11th, and on the 12th it was again incised, when a free flow of pus followed, with great relief to pain and tension.

Having surmised the existance of some foreign substance, either a necrosed spicula of bone or a fragment of the ball said to have been extracted, I explored the cavity with Nelaton's porcelain tipped probe. It passed down about 2 1-2 inches and struck a solid substance behind the zygomatic arch which discolored the porcelain, proving it to be lead. The incision was immediately enlarged sufficiently to admit the finger,—cutting across the anterior branch of the temporal artery [which was ligatured] and dividing the anterior fibres of the temporal muscle, *behind which* the forceps were passed down to the ball, which was fortunately seized at the best advantage and extracted on the first trial. It weighed 3-4 of an ounce, was indented, or furrowed rather, on one side, and a little rough on the other. The abcess healed rapidly, patient remains well, the obscuration of vision, and the headache, &c., having gradually ceased. Patient objected to taking chloroform or it would have been given.

Correspondence.

At the 22d Annual Meeting of the National Medical Association the following resolution was adopted:

Resolved, That each State and Local Medical Society be requested to provide, as a permanent part of its organization, a Board of Censors for determining the educational qualifications of such young men as propose to commence the study of medicine, and that no member of such Societies be permitted to receive a student into his office until such student presents a certificate of proper preliminary education from the Censors appointed for that purpose, or a degree from some literary college of known good standing.

The necessity of enforcing this regulation is too well appreciated by every member of the profession to require extended notice.

The Primary Board appointed at the last annual meeting of Erie County Medical Society, held January 9th, 1872, for the purpose of examining young men preparatory to the study of medicine, would announce that persons requiring such examination will be expected to furnish evidence of good moral character, and to show a satisfactory acquaintance with the following subjects:

The rules of the construction of English Language, English Literature, Geography, History, (Ancient and Modern,) with Arithmetic, Algebra to Quadratics, Elementary Geometry, Moral Science, with Elementary Chemistry and Natural Philosophy, or to show a diploma from some recognized literary college.

In this attempt to impress the importance of good preliminary education upon young men about to enter upon the study of medicine we hope to have your support and co-operation.

The Board will meet for the examination of applicants on the last Wednesday of every month at the office of Dr. H. R. Hopkins, No. 9 West Swan street, at 11 o'clock A. M.

M. B. FOLWELL,
H. R. HOPKINS,
M. WILLOUGHBY, JR.
Primary Board.

BUFFALO, January 17, 1872.

* * *

Genesee Co. Medical Society.

PAVILION, N. Y., Jan. 15, 1872.

DEAR DOCTOR:—Will you please publish the following, which I am authorized to send you?

Yours truly,
W. B. SPRAGUE.

J. F. MINER.

At the regular semi-annual meeting held at the St. James Hotel, in the village of Batavia, on Tuesday, Jan. 9th, 1872, the following preamble and resolution was offered by Dr. O. R. Croff, and unanimously adopted:

Whereas, At a special meeting of the Genesee County Medical Society, held July 5, 1870, a certain motion rescinding the resolution of expulsion in reference to Dr. N. G. Clark was passed, and whereas the minutes were not ordered published as should have been done in justice to Dr. Clark and to the Society:

Resolved, That the fact of such rescinding of a motion which was illegally made for expulsion of Dr. Clark be published in the *Buffalo Medical Journal*, and that the Society regret that the publication of such action was unintentionally deferred.

Meeting then adjourned to the second Tuesday of February next.

WM. B. SPRAGUE, Chairman.

L. L. TOZIER, Secretary.

Miscellaneous.

On Arterial Transfusion of Blood.

Professor Hueter recorded some time ago a case of poisoning with carbonic oxide, in which he preserved the life of the patient by transfusion. More recently, in the *Centralblatt*, he has recommended the same, on the ground of the successful issue of three cases where healthy blood was injected to remove the symptoms accompanying intense septicæmia. Hueter pursued in these cases not the usual plan of injecting the venous blood of a healthy man into the *artery* of the invalid. He performed the operation in the following way: During the defibrination of the blood by beating and filtration through a fine piece of muslin by assistants, he exposes the radial artery or the tibialis posticus, above the malleolus internus, the latter being just as easy to find as the former. Any slight hemorrhage is carefully arrested, and a very small opening is made in the sheath of the artery, which is separated from the adventitia; a sound is then pushed under the artery, and moved hither and thither, till about two and a half centimetres of the artery is isolated. Four pieces of strong silk are now passed beneath the vessel, of which one forms a reserve ligature. The silk nearest to the heart is now tied tightly, so as to prevent all entrance into the vessel of blood coming from the heart. The injection syringe is now filled, and the lowermost silk slightly pulled, so as to stretch the vessel. An opening is now made in its upper part, by cutting it about half way transversely with scissors. The canula is introduced and secured by the third thread. The tension hitherto kept on the lowermost silk is now relaxed and the injection begun to be forced in. When the injection is completed, the lowermost thread is tightened, and the piece of artery between the two ligatures excised. The wound is simply dressed. The principal difficulties of the operation are its complexity, and the necessity that exists of maintaining a considerable pressure on the piston to overcome the cardiac pressure. On the latter ground Hueter recommended the employment of Mosler's injection syringe, in which the piston works with a screw. In Hueter's opinion, the objections are far outweighed by the advantages which arterial transfusion affords. One of these advantages is, that the blood reaches the heart more slowly, and with greater steadiness and regularity, than by venous transfusion. He regards the injection of small quantities (two, three or four ounces) as useless, in most instances from eight ounces to one pound being requisite. But if so large a quantity be suddenly thrown upon the heart as occurs in injection by the veins, a fatal arrest of its activity may occur. It must be remembered, also, that in consequence of the bleeding prior to the injection, as much unhealthy blood is removed as good is introduced from the system. Another advantage attendant on the arterial injection is security against the introduction of air, any small quantities that may be introduced being rapidly absorbed during the passage of the blood through the capillaries. By this method, also, all danger of phthisis is avoided, which in many instances, when transfusion of the veins would otherwise have proved successful, had led to the death of the patient. It has not yet been ascertained whether the contact of a large quantity of blood, rendered arterial by whipping with the waste of the right heart, is of any real advantage. In the mode of transfusion by the arteries, the blood necessarily becomes venous during its passage through the capillaries. In conclusion, Mr. Hueter observes that transfusion, whether through the veins or arteries, constitutes a weapon against diseases which can in no other way be contested, and points out the excellent results we may anticipate from its employment.—*Aerztliches Literaturblatt, No.* 6, 1871, and *Langenbec's Archiv*, 1870.—*Cincinnati Lancet and Observer.*

Editorial Department.

Annual Meeting of the Erie County Medical Society.---Reception of a Portrait of Dr. Levi J. Ham.

The annual meeting of the Erie County Medical Society was held in Buffalo Tuesday, Jan. 9, and was quite largely attended. The election of officers and propositions to amend the by-laws of the Society, occupied most of the time of the session. Some amendments were passed (supposed to be passed) but as there had been no previous written notice of intention to amend, the action was irregular, and must come up for future approval. The regular order of business was suspended by motion of Dr. Stork, when Dr. Miner read the following communication:

South Bend, Ind., Dec. 22, 1871.

My Dear Doctor;—I ship my portrait to the Erie County Medical Soceity, to your care, per Express to-day. Please present it to the Society in my name, as a token of the kindly regards I still entertain for it, and for its individual members. The study and practice of my profession has been a life business with me; I still love it. Respects to all the members of the Society.

Yours, very truly,
J. F. Miner, M. D. LEVI J. HAM.

Accompanying this he has furnished the following particulars of his life:

Born Nov. 16, 1805. Graduated in Dartmouth College August 28, 1828. Received Medical Degree Bowdoin College March 19, 1831. Was a private student of Prof. R. D. Mussey two years. Practiced in York county, Maine, from 1831 to 1845. Practiced in Williamsville, Erie county, N. Y., from 1846 to 1859. Practiced in South Bend, Ind., from 1859 to 1871. Was appointed Surgeon of the 48th Ind. vol. Dec. 4, 1861. Resigned April 9, 1865. Was

Chairman of the Operating Board of Surgeons in the 7th Division of the 17th Army Corps in all the great battles in front of Vicksburgh 1863-4, and at Lookout Mountain and Mission Ridge in 1864. Was at one time Medical Director of the 17th Army Corps under the gallant McPherson.

He says: "I have always had a taste for operative surgery; always been eminently conservative in all my operations. I now have a good practice, a good home, good friends, and a competence of this world's goods."

To this brief and expressive autobiography of Dr. Ham, it is proper that I add, that he has always held high and honorable position in his profession, and that he is rightfully regarded by both the profession and public as a high minded, honorable physician, whose ample opportunities of early education, and whose extensive observation and experience have fitted for professional eminence. His kind mention of his former membership with us, and the generous donation of his portrait adds to the number of his numerous acts which are worthy of imitation Especially is this generous, acceptable, and appropriate donation of his portrait worthy of imitation, by his former associates, many of whom, will soon no more return to grace these annual meetings with their actual presence, and who may thus help to keep alive memories which all desire to cherish.

Dr. Edward Stork made a very pleasant reference to the character and surgical skill of Dr. Ham while practicing in Erie county, and *moved* "that the portrait be accepted and the thanks of the Society returned, with hearty good wishes for his health, happiness and long continued usefulness."

The reception of a large, full-sized portrait, of a much respected former member, was occasion of much gratification to the Society.

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Vaccination and Small Pox.

It is noticeable that though Jenner discovered the protective power of vaccination, still small pox epidemics prevail in our large cities and produce most alarming and fatal effects. There is no doubt that vaccination and re-vaccination is a complete protection from small pox. Still the question is regarded by the public as quite unsettled, and the inquiry is made, if so, why does the disease prevail so extensively, and why is varioloid so common in those who have been vaccinated? The question should be answered to the public and made plain so far as may be; but the impossibility of teaching medical facts, to the unprofessional, is very well understood.

The faults of our present system of protection from small pox are still very numerous; they scarcely require enumeration to medical men.

1st. There is not attached to the event of being protected from small pox, anything of the importance which it really demands. It is regarded as a matter of almost no consequence at all, to be attended to when some of the neighbors are announced as having the disease; whereas, it should be looked upon as one of the principal events of life, and be recorded with birth, baptism, marriage and death.

2nd. *Re*-vaccination should be understood to be essential to protection—protection from varioloid or modified small pox. In other words, parents should know that their children are not *protected* in any true, popular sense, until pure vacine virus will not produce *its* characteristic effects, and that there is every reason to believe when *thus* vaccinuated they are more perfectly protected than are those who have had small pox, from future attacks.

3d. Better ideas should prevail both with the profession and public as to what *is* a real vaccine vesicle, and how it can only be produced by the vaccine virus; that eczematous scales, scales from second vaccination and the second scale from true vaccine sore are incapable of producing the *vaccine vesicle*, or of protecting at all, from small pox.

When these simple facts are appreciated—when the event of being vaccinated is regarded in its true light, and when our present plan of gratuitous, unwatched, promiscuous, uncared for, and almost wholly useless plan of public vaccination is superceded by an intelligent, carefully watched, thoroughly executed procedure of *protection*, such as is within certain and easy reach, then no more small pox. That it prevails in Buffalo and other cities is proof of ignorance and poor government and criminal neglect.

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Books Reviewed.

Practical Treatise on Fractures and Dislocations. By Frank Hastings Hamilton, A M., M.D., L.L.D. Henry C. Lea, Philadelphia, 1871.

In this, the fourth edition, the author says: Discussions which occupied considerable space in previous editions have been omitted in the present; such for example, as that relating to the value of certain specimens claiming to represent bony union after intra-capsular fractures of the neck of the femur. Many obsolete forms of apparatus have also been excluded. Nearly one-fourth of the whole number of illustrations have been changed, in most cases by the substitution of original wood cuts. This he says has been done to make room for more practical observations. In the preface the author gives a well deserved and truthful compliment to Dr. Bigelow of Boston, and speaks of having introduced into his work "several of the beautiful illustrations contained in Dr. Bigelow's treatise on the *Mechanism of Dislocation and Fracture of the Hip*." He says: "Since Sir Astley Cooper wrote, probably no man has thrown so much light upon the subject of hip-joint accidents, or contributed so much toward an accurate and systematic plan of treatment as the distinguished Boston surgeon."

This work by Dr. Hamilton is so thoroughly before the profession that after hinting the changes which have been made little further need be said.

The present volume comes to us greatly enlarged and improved, and highly as we prized the work in its former editions we regard the present as so much improved in all respects, as to have nearly lost its identity and assumed the features of a new and complete treatise on fractures and dislocations. Perhaps there is no one standard surgical work consulted more frequently and with deeper interest than this, and it is not saying too much of it to affirm that it has been of incomparable value to surgeons in obtaining satisfactory results, as well as in determining what is really to be expected after fracture and dislocation.

The work in its first edition was written in this city, and many of the original observations upon which his conclusions rest, were made in Buffalo and vicinity. It is natural that we claim somewhat on account of the birth place of the work; it has grown vigorously and healthy, and is now offered to the profession in matter and style of which not only the author, but the American profession may well be proud.

As already intimated, to this work surgeons and judges and juries all turn, finding it always faithful to fact, always sustained by careful clinical observation, always on the side of the skillful surgeon, always in the right; a work no surgeon is safe without owning and reading.

A Text Book of Pathological Histology; an Introduction to the Study of Pathological Anatomy. By Dr. Edward Rindfleisch. Translated from the German by William C. Kloman, M. D., and E. T. Miles, M. D. Philadelphia: Lindsay & Blakiston, 1872.

We cannot undertake to give any just idea of the extent and scope of this work. It is a recent, comprehensive, and we should say, complete treatise upon pathological histology containing the most recent views upon the nature of disease. For the careful student of medicine this work is of inestimable value, while the less ambitious and more practically inclined, will find it too scientific and minute to interest them. It is designed for reading and thinking students of the profession, and will be appreciated by them only.

The minute changes in disease are carefully described, and to add to correct understanding the text is illustrated by two hundred and eight beautifully made wood cuts. Altogether it constitutes one of the most valuable works upon the subject, in our language, and we think will hold first rank as standard in pathological histology.

Emergencies and How to Treat Them. By Joseph N. Howe, M. D. New York; D. Appleton & Co., 1871.

The "emergencies" treated by this author are the following: hemorrhage, wounds of important organs, wounds of arteries and veins, poisoned wounds, extraction of foreign bodies, burns, scalds and effects of cold, strangulated hernia, loss of conciousness, asphyxia, sun stroke, dyspnœa œdema glottidis, convulsions, suspended animation, complications of labor, poisons.

There are chapters upon all the above "emergencies," and very well written and correct views are expressed upon the various topics. It is offered to students and practitioners, and we believe the author has combined the most recent views with the most attractive style of presenting them.

The Druggists' General Receipt Book, with Veterinary Formulary. By Henry Beasley. Philadelphia, Lindsay & Blakiston, 1871.

This book contains a receipt for making nearly everything made by druggists, and we should think that for them it would be valuable. The veterinary formulary must also be a very valuable guide to veterinary surgeons. It is not without attractions to physicians, though it is designed especially for druggists.

Disorders of the Nervous System in Childhood. By Charles West, M. D. Philadelphia, Henry C. Lea, 1871.

This work contains three Lectures. 1st, on Neuralgia and Epilepsy. 2nd, on Chorea and Paralysis. 3d, Disorder and Loss of Power of Speech, Mental and Moral Peculiarities and their disorders. These Lectures were delivered at the Royal College of Physicians of London, in March, 1871. The work is upon subjects in which all physicians are interested, and the lectures will be read with special interest.

Neumann's Hand Book of Skin Diseases. Translated from the German by Lucius D. Buckley, A.M., M.D. New York, D. Appleton & Co., 1872.

The frequent appearance of works upon skin diseases indicates the unsettled condition of this branch of medicine as well as the active efforts being made to remove the confusion which has always existed in the nomenclature and classification of skin diseases.

From a necessarily very imperfect examination of the work before us, we see that much careful investigation has been made to throw all possible light upon the microscopic changes which take place in many skin diseases, and to indicate as completely as may be, the best measures of relief. It is a work of practical value, and evidently is made to be concise, comprehensive and practical. The text is illustrated with finely made wood cuts, which adds greatly to a correct understanding of the pathology of many skin diseases. This book is for the careful student of skin diseases as well as text book for the active practitioner.

Functions and Disorders of the Reproductive Organs, in Childhood, Youth, Adult Age and Advanced Life. By William Acton, M. R. C. S. Philadelphia, Lindsay & Blackiston, 1871.

This work is, as it should be, largely in the hands of the profession; it is a complete and scientific treatise upon the disorders and functions of the reproductive organs, and as such should be in the hands of all physicians. There is not a single class of diseases so imperfectly understood and so unscientifically treated as those of the reproductive organs. Quacks and charlatans have educated the people in error to the highest degree possible, their fears and apprehensions have been cultivated and finally they have been imposed upon and cheated. This book has done much to correct the views of the profession and to improve their modes of treating many of the diseases and derangements of the reproductive organs. It will be well for the profession and public if this work is carefully read and considered; it is suggestive of much truth with which all physicians should be acquainted.

Restorative Medicine. By Thomas King Chambers, M.D., etc. Philadelphia, Henry C. Lea, 1871.

"For upward of two centuries the London College of Physicians complied with the letter of Harvey's wishes, as expressed in his Deed of Gift, by causing an Annual Oration to delivered in Latin." This is the Harverian Annual Oration, and though delivered in England is published in America first. The address is ingenious and very instructive, and shows how our science, so-called, changes, and by what gradual steps the art of the old time is exchanged for the wholly unlike views of the present.

The "sequels" comprise two breakfast dialogues in which the question of Female Doctors, is discussed, and nearly all other questions. These chapters are highly instructive and amusing.

American Medical Association.

Office of Permanent Secretary, WM. B. ATKINSON, 1400 *Pine Street, corner Broad, Philadelphia.*

The Twenty-third Annual Session will be held in Philadelphia, Pa., May 7, 1872, at 11 A. M. Committees are expected to report: On Cultivation of the Cinchona Tree. On the Anatomy and Diseases of the Retina. On the Comparative Pathology and the effects which Diseases of Inferior Animals have upon the Human System. On the Structure of the White Blood Corpuscles On Vaccinatian. On Skin Transplantation. On the Nature and Process of the Restoration of Bone. On some Diseases peculiar to Colorado. On Correspondence with State Medical Societies. On National Health Council. On Nomenclature of Diseases. On what, if any, Legislative means are expedient and available, to prevent the spread of Contagious Diseases. On American Medical Necrology. On Medical Education. On Medical Literature. On Prize Essays. On the Climatology and Epidemics of all the States.

Physicians desiring to present papers before the Association should observe the following rule:

"Papers appropriate to the several sections, in order to secure consideration and action, must be sent to the Secretary of the appropriate section at least one month before the meeting which is to act upon them. It shall be the duty of the Secretary to whom such papers are sent, to examine them with care, and, with the advice of the Chairman of his Section, to determine the time and order of their presentation, and give due notice of the same." §

Secretaries of all medical organizations are requested to forward lists of their Delegates, as soon as elected, to the Permanent Secretary.

Railroad and Hotel arrangements will be announced at an early date.

W. B. ATKINSON.

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MEETING OF THE NEW YORK STATE MEDICAL SOCIETY.—This Society will hold its Annual Meeting at Albany, commencing Tuesday, Feb'y 6th, 1872. It is expected that a large number of delegates and permanent members will be present.

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MEDICAL DEPARTMENT HARVARD UNIVERSITY.—The number of students in all the departments of Harvard University is not so large as last year by 210—a falling off of 105 medical students.

The important change in the latter, in the plan of study and the requisites for a medical degree, probably accounts for the deficiency in numbers.—*M. Record.*

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DEATHS FROM CHLOROFORM.—According to the *Boston Medical and Surgical Journal*, seventy deaths from chloroform were reported in England previous to 1870. Twenty-nine cases, collected from American and foreign journals, have been noted since that date; nineteen cases in the issue of June 15, 1871, and ten cases in that of December 14, 1871.

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THE ST. LOUIS MEDICAL AND SURGICAL JOURNAL.—This valuable medical journal will, in the future, be published monthly, instead of bi-monthly as heretofore. The new editors are Drs. William S. Edgar and H. Z. Gill.

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Prof. Crocq, of Brussels, on Cholera Contagion.

The question of cholera is at present one of so much importance that all documents on the subject coming from recognized authorities, and bearing a practical character, must be noted with great care. Prof. Crocq, of Belgium, Vice President of the Brussels Academy of Medicine, has just communicated to the Paris Academy of Medicine the result of a series of experiments which he has carried on upon animals with the object of testing whether the alvine evacuations constitute the true vehicle of the choleraic virus. In all of the animals he has succeeded in producing most of the symptoms of cholera, and he finds that the alvine evacuations indeed constitute the vehicle of the virus not, however, as was suggested by Pettenkofer. through a kind of fermentation, but because of the immediate presence of the virus in the evacuations, M. Crocq draws the following inferences from the results of his researches:—

1. Cholera is contagious, and is transmitted by a virus, the vehicle of which is the alvine evacuations.

2. The virus may manifest its effects even less than twelve hours before any evacuation of matter.

3. The period of incubation may be only of two hours ; and it may continue one or two days, and even more.

4. All the subjects do not show a like predisposition to undergo the effects of the choleraic poison, receptivity may even be altogether absent.—*Exchange*—*Boston Journal*

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Books and Pamphlets Received.

Surgeon General's Circular, No. 3.

Proceedings of the Royal Society, Vol. xix, Nos. 123, 124, 125, 126, 127, 128, 129. London, Eng.: William Wesley,

Proceedings of the State Medical Society of Arkansas.

Anæsthesia, Hospitalism, Hermaphroditism, and a proposal to stamp out small pox and other contagious diseases. By Sir James Y. Simpson, M.D. Edited by Sir W. G. Simpson, B.A. New York; D. Appleton & Co. Buffalo: Breed, Lent & Co.

A Clinical Manual of the Diseases of the Ear. By Lawrence Trumbull M.D., with a colored lithograph plate and over one hundred illustrations on wood. Philadelphia: J. B. Lippincott & Co. Buffalo: Breed, Lent & Co.

Fireside Science. A series of popular and scientific essays upon subjects connected with everyday life. By James R. Nichols, A.M., M. D. New York: Hurd & Houghton, 1872. Buffalo: Breed, Lent & Co.

The Mutual Relations of the Medical Profession, its press, and the community. By Dr. Storer, Jr.(Horatio). Boston: James Campbell. 1872.

Remarks upon the diagnosis of ovarian tumors from fibro-cystic tumors of the uterus. By Charles C. Lee, M.D. New York: D. Appleton & Co., 1872.

Inaugural Address, including a Paper on Infant Asylums. By A. Jacobi, M.D. D. Appleton & Co., 1872.

Report of the Hon. Secretary of the Syme Memorial Fund.

Trismus Nascentium. By James S. Bailey, M. D., Albany.

On Vascular Nævi and their treatment by the actual cautery. By B. F. Dawson, M. D.

The Physicians' Annual, 1872. A complete calender for city and country practitioner. Philadelphia: S. W. Butler, M. D., 1872.

Third Annual Report of the Children's Hospital, Boston, 1870 to 1871.

BUFFALO
Medical and Surgical Journal.

VOL. XI. FEBRUARY, 1872. No. 7.

Original Communications.

ART. I.—*Medical Society of the County of Albany. Semi-Monthly Meeting, January 11th, and 24th,* 1872. *Reported by* James S. Bailey, M. D.

Dr. Joseph Lewi, President, in the chair.

Dr. A. Van Derveer reported the following case of *Amputation of the Cervix Uteri*:

Mrs. A—, æt. 24, married 6 years, began to menstruate at 15, and soon after noticed appearances of the cervix or os externum between the external labia; menstruation always attended with great pain. Dr. V. first saw her January, 1871, and diagnosticated, "Longitudinal hypertrophy of the cervix." The fundus and body of the uterus was normal, the uterus measured five and one-fourth inches; the cervix measured three inches. The operation was performed March 23rd, 1871, by slitting up the cervix uteri, and with curved scissors removing from two to two and a half inches of cervix. The wound was closed with silver sutures. Union took place speedily. She menstruated April, May, June and July without pain. In August she conceived, and over-reaching in cleaning house, aborted Nov. 15th, 1871. The cervix now presented the same appearance as usual after parturition. Dr. VanDerveer also exhibited to the society a *polypus* extracted from the posterior nares also a diseased kidney that had undergone fatty degeneration.

Dr. Amos Fowler reported the following case: Was called to see a lady in Oct., 1870, who was suffering with convulsions, the se were succeeded by paralysis on the right side of the body. After lying some days in a comatose condition she gradually recovered her senses, and in three or four weeks, sensation gradually returned. After this any unusual excitement precipitated convulsions. The urine was scanty, high-colored, and heavily laden with phosphates, constipation was also present. After a succession of various symptoms, in about a year after the attack, blisters appeared upon the face resembling erysipelas; these disappeared, but attacked the limbs and arm of the left or well side. These parts also became livid. She became deaf in one ear and blind in one eye. Last summer she had a convulsion, bled freely at the nose and mouth, and the arm speedily regained its normal color and strength. Diagnosis: Apoplectic clot on the brain.

Dr. J. S. Bailey ascribed the purple color of the arm and leg to a lack of vitality, he also reported a case of *hemiplegia,* which on investigation proved to be hysteria.

The following named gentlemen were proposed for membership: Drs. F. C. Curtis, J. B. Stonehouse, Jr., and E. R. VanSlyke, all of which were referred to the comittiæ minora.

Dr. Chas. Devol then remarked upon *Enteric obstructions,* and divided the subject into two distinct headings, viz: I.—Those cases which are due to accumulations of feculent matter or foreign substances in the intestines, either in the small intestines, or at the capul coli, and in the colon. II.—Those due to accumulation in the rectum so hard as to fill the pelvic cavity and make an enormous tumor in the perinæum. In the first [class two illustrative cases were given, viz: Wm. S—, middle aged teamster, suffering for three days from what was supposed to be bilious colic, and when seen by Dr. D. had hiccough, cold clammy sweat and stercoracious vomiting; percussion and manipulation disclosed a small hard tumor in the region of the capulcoli, by placing the patient upon his hands and knees enemas were given, when a ball of potato skins were voided compact, two inches in diameter. Now all outward symptoms subsided, and the patient was restored to his accustomed health. 2d case.—A boy enormously corpulent, a gormandizer, eating everything within his reach, examination revealed the abdomen distended with hard feculent matter. The patient would seemingly fall down in spasms, and lay helpless for five or ten minutes, then get up and walk around as usual. When Dr. D. was called, his bowels were constipated, not having moved for seven days. Diagnosis: Enteric obstruction. By the use of enemas excrements of four weeks accumulations were voided which bore all the markings and corrugations of the small and large intestines and rectum.

This matter measured more in length than the boy; result, recovery. In the second class enemas are useless, digital operations alone succeed, cases of elderly people; women suffering in this way, also another class was mentioned, viz: scirrhus of the rectum or vagina, or both. Dr. D. remarked that feculent matter was discharged in a fluid state in such conditions, the fæces decomposing and becoming liquid above the point of obstruction. These cases were hopeless and incurable; the treatment must be expectant and palliative. The speaker attributed attacks of the majority of cases of dysentery to partial obstructions and retention of feculent matter. Dr. Thompson, Sabin, Boyce, Davis and others participated in the discussion of the subject, each mentioning interesting cases.

Dr. J. N. Northrop related a case of tumor in the right hyperchondrium, palpable to the touch, and very sensitive, which had been noticed for months, was accompanied with retching, fever, and frequent desire to defecate. Enemas and opiates were used with only partial relief. He then gave aloes gr. iv., of nux vomica gr. i., veratrum viride, m. 4, several times during the day, when on the fourth day large feculent masses, as large as the fist were discharged, much to the relief of the patient.

Dr. R. H. Sabin reported the following case of *Gastro Enteritis*. Male, æt. 53 years, carpenter, has been troubled with indigestion two years ago, and consequently had poor health, pains in the bowels and stomach, with vomiting. Oct. 22d he consulted Dr. S., when he discovered liquid in the abdomen. Blisters temporarily relieved the pain, but ascites increased and death took place. Nov. 25th a post mortem revealed complete destruction of the peritoneum, the liquid being shreddy. The mucous membrane of the stomach and bowels were highly inflamed, and the rectum completely obliterated.

Dr. James S. Bailey arose and said that as Dr. Milton M. Lamb, for fifteen years a member of the Society, had decided to remove to Lansingburgh to relieve the professional labors of his father-in-law, Dr. Davis, and as he had by his quiet and courteous deportment and estimable character, gained the respect and confidence of a large circle of acquaintances and retained their complete confidence during this period. The society owed him an expression of their good will. He therefore offered the following:

WHEREAS, Dr. Milton M. Lamb is about leaving this city for the purpose of residing and practicing his profession in the town of Lansingburgh, therefore

Resolved, That it is with regret that this society part with its honored associate and member, and hope that he may receive in his new abode, that courtesy and kind consideration to which his urbanity of manners and his professional conduct have ever entitled him; that Dr. Lamb carries with him, in leaving this city, the good wishes and respect of every member of the Albany County Medical Society, of which he has been a member for the last 15 years; that this society wish Dr. Lamb happiness in all his relations of life and continued success in his profession, which his professional attainments so richly deserve. Adopted.

DR. P. J. C. W. GOLDING reported the following case of *Catalepsy*: J. B—, æt. 40, Irish bar tender, Dec. 17th, 1871. After waiting on some customers, was taken with a fit, with sudden loss of sensation and volition, the body and limbs remaining in and retaining the position which they had when seized; the eyes were open and fixed, pulse natural, the color and respiration normal, no rigidity. By restoratives he regained his consciousness, began to bleed freely. He remained about four hours in the fit. The second day after the attack he was taken into the country, and has since enjoyed the best of health. Dr. G. then said that intenseness of thought, cessation of the catamenia, and terror have been ascribed as the causes of this malady. Watson asserts that catalepsy must depend on "congelation of the nervous fluid," and Hoffmann considers that freezing produces first catalepsy and then death. The Dr. ascribed the cause of this attack in the man Burns more to the "judgment of God in answer to a wicked and profane prayer," than to any form of terror. It appears that Burns was accused by his employer of appropriating to himself money belonging to the latter. In asserting his innocence Burns "sought the interposition of the Almighty, begging of God to strike him dead before morning if he had taken the money.

The employer went to obtain legal advice, and on his return found his attendant in the cataleptic state. Dr. G. was inclined to the opinion that this case partook more of the nature of a Divine judgment than terror superinduced by the contemplation of criminal proceedings in criminal courts of law.

Dr. SABIN then related a case which he considered catalepsy, but which was more like somnambulism than anything else.

Dr. D. V. O'Leary reported the following: July 23d was called to see B. R., æt. 21, suffering from compound fracture of the leg, the tibia protruding through the integuments. Tetanic convulsions set in on the 23d day of July. This gentleman was traveling with a circus, was thrown from a wagon when the fracture was produced. Dr. Hill of Canandaigua placed the limb in a fracture box. The convulsions lasted 14 days, the addominal and muscles of the neek were much contracted. Opium in large doses failed to produce sleep or to moderate the spasms. Hydrate Chloral in half-drachm doses was administered every four hours, when sleep was procured for three or four successive hours. The Chloral was continued for fourteen days, one day only was it omitted, as no medicine could be given by the mouth, then chloroform was administered by inhalation. Recovery eventually took place, and the fracture united with only a half inch shortening.

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ART. II.—*On the Recent Advances in the Theory of Vision.* By H. HELMHOLTZ, *(of the Royal Society of London.)*

Translated from *Les Annales d'Oculistique*, BY F. W ABBOTT, M. D.

CONTINUED.

To look at an object means, to direct the eye so that the image of the object falls upon the place of most distinct vision; it means, in other words, to make use of *direct vision*, in opposition to *indirect vision*, which is exercised by means of the lateral portions of the retina.

The lack of precision of the image, and the limited number of the sensitive elements of the retina throughout the greater part of the field of vision, are richly compensated by the eye's extreme mobility, which enables us to look successively and rapidly at all that interests us in the field of vision. Upon this great mobility, rests the principal superiority of the eye over other optical instruments. Furthermore, thanks to the peculiar manner in which our attention is exercised, it being directed to but one representation at a time, and passing constantly to new objects, the eye, as it is constructed, renders us the same services that it would if the definition of the field were the same throughout; so true is this, that those whose attention has never been called to it are usually ignorant of the imperfection of indirect vision. We look at that which interests us, and we see it clearly at each moment; the objects which we do not see in that way do not generally interest us, our attention is not directed to them, and we do not notice the imperfectness of their image.

On the contrary, it is difficult, without the long practice which certain researches in physiology require, to direct our attention to an object seen indirectly without immediately turning the eye toward this object. Our attention is, as it were, riveted to the point looked at, and the movement of the eye is inseparable from that of the attention. Again, it is no less difficult, without much practice, to fix the eye exactly upon one point for several consecutive seconds, as it is necessary to do, for example, in order to obtain sharply defined accidental images.

It is to these circumstances, doubtless, that we must attribute in great part, the importance of the role which the eye plays in the expression of the feelings. The movement of the eyes is one of the most positive signs of the movement of the attention, and consequently, also, of that of the ideas in the mind of the person observed.

The rapidity of the motions of the eye is equaled by that of the changes of the accommodation. By means of these changes the optical apparatus of the eye adapts itself for the vision of the objects at different distances, which successively attract our attention, and enables us to see them with perfect distinctness. All these changes of direction and of focus are much more rapid than they are in our unhandy optical instruments. Like the camera, the eye cannot show simultaneously with the same distinctness, objects situated at different distances; but it can pass from the distinct vision of one object to that of another with such rapidity that those who have not reflected upon the manner in which vision operates are not conscious of these changes.

Let us continue the examination of our optical apparatus. We do not wish to speak here of myopia or presbyopia, those individual anomalies of accommodation of which mention has already been made. These anomalies appear to be attributable, either to the artificial manner of living which the state of civilization induces, or to the progress of age. The faculty of accommodation passes away with the years, and distinct vision persists only for a certain determinate distance, different in different persons. To see beyond or within this distance, it is necessary to have recourse to spectacles.

There is another defect which we would not tolerate in our optical instruments. We desire that they should show no dispersion, in other words, that they should be achromatic. The colored dispersion which optical instruments present, resultsfrom the fact that the refraction of the different rays of solar light is not precisely the same, in the transparent substances which are known to us. As a consequence, the size and the situation of optical images, formed by the differently colored rays, differ a little; they cease to coincide perfectly in the field of vision of the spectator, and, according as the red rays or the blue rays give the largest image, the white surfaces appear bordered either with a yellowish red or a bluish violet, which injures, more or less, the purity of the contours.

We know the singular role which the question of the dispersion in the eye played at the time of the invention of achromatic glasses—a celebrated example of false premises leading to true conclusions. Newton believed that he had found a relation between the powers of the refraction and dispersion of different transparent substances which would render impossible the construction of achromatic instruments. Euler, admitting the achromatism of the eye, was led to contest the exactness of the relation adduced by Newton between the powers of refraction and dispersion of the different transparent substances. He then laid down theoretical rules for the construction of achromatic instruments—rules which Dolland put in practice. But Dolland at once remarked that the eye could not be achromatic, because its construction did not correspond to the rules established by Euler. Frauenhofer finally gave the numerical measurements of the amount of the dispersion. An eye, accommodated for an infinite distance in red light, is accommodated for a distance of only two feet in the violet. If we are not conscious of this dispersion in white light, it is due to the fact that the extreme colors of the spectrum are at the same time the feeblest, and that the images which they form are scarcely seen by the side of the stronger images which are formed by the yellow, red, and blue rays. On the other hand, this phenomenon becomes very remarkable when we isolate the extreme rays of the spectrum by means of violet glasses. It happens that glasses colored by oxide of cobalt transmit the red and violet rays, but extinguish the yellow and green, that is to say, the mean, and at the same time most intense colors of the spectrum. In looking from a distance at lanterns furnished with such glasses those whose vision is normal see red flames surrounded by a large blueish violet halo. This halo is the image of diffusion proceeding from the blue and violet rays of the flame. This daily phenomenon affords a convenient method of showing conclusively the existence of dispersion in the eye.

If the dispersion which takes place in the eye attracts our attention so slightly under ordinary circumstances, and if it is in reality a little less than in a glass instrument of the same power, the reason is, that in this case the principal refracting medium is water, which produces less dispersion than glass. The dispersion in the eye, however, is a little greater than would be produced by an apparatus made of pure water, other things being equal. In résumé, in spite of its existence, the dispersion does not sensibly disturb vision in ordinary white light.

Spherical aberration is a second defect which becomes very obvious in optical instruments of high power. Spherical refracting surfaces re-unite precisely at one point rays which proceed from one point of the object, only when these rays come almost normal to each refracting surface. To obtain an exact meeting of the rays in the central part of the image alone, it is necessary to employ surfaces differing in sphericity, and these have only recently been able to obtain with any degree of precision. Now the eye possesses surfaces which are more or less elliptical, and the prejudice in in favor of the perfection of this organ has led to attributing to them the suppression of Spherical aberration. Never did this prejudice lead to a greater error. In truth, more exact researches have discovered in the eye, aberrations much greater than that of sphericity—aberrations, which a little care enables us to avoid in artificial instruments, and by the side of which spherical aberration becomes unworthy of notice. The measurements of the curvature of the cornea, first made by Senff at Dorpat, then continued in great numbers with the aid of my ophthalmometer, by Donders, Knapp, and others, have proved that the cornea of the majority of human eyes far from having a perfectly symmetrical surface presents different curvatures in its different meridians. I have also indicated a method of examining the centration of the living eye, that is to say, of discovering whether the crystalline lens and the cornea are formed symmetrically in relation to the same axis. The application of this method has revealed in the eyes which were examined defects of centration, feeble, it is true, but incontestable. The consequences of these two kinds of aberration in the eye, known under the name of astigmatism, are found in a greater or less degree in the majority of human eyes. This defect hinders us from seeing simultaneously with perfect distinctness horizontal and vertical lines, situated at the same distance from the eye. When the astigmatism attains a considerable degree, we must have recourse to spectacle glasses of cylindrical surface, to relieve the troubles of the vision. This subject has recently attracted the attention of oculists in an especial manner.

This is not all. An elliptical refracting surface which is unsymmetrical, or a badly centred lens, shows the image of astar, at different foci, in the shape of an ellipse, a circle, or a line. In the eye, the images of luminous points are still less regular, they are surrounded by irregular rays. This phenomenon is due to the lens whose fibres are disposed in six different directions. In fact, the rays which we see around stars or distant lights are indices of the radiating structure of our lens, and the name of star, which we usually give to every radiating object, proves how wide spread is this defect. It is for the same reason that many people see the crescent of the moon double or triple when it is very narrow. If an optician should deliver to me an instrument having such imperfections, I should consider myself perfectly justified in refusing his work, and in accompanying my refusal with the harshest expressions. It is evident that I would not do so with my eyes; I desire, on the contrary, to preserve them as long as possible, in spite of their defects. If, notwithstanding their imperfections, we are glad to keep our eyes, such as they are, the optician is not less justified in criticising the imperfections they present relatively to his art.

We are far from having finished our arraignment.

If opticians wish to satisfy our wants, they must use good, perfectly transparent glass. When the glass is clouded, bright surfaces appear to be surrounded by a sort of nimbus, black appears gray, and white less clear than it ought. These defects exist in the images of the external world which the eye furnishes, and it is for this reason that we have difficulty in distinguishing dark objects situated in the neighborhood of very luminous ones. If we strongly illuminate the cornea and the crystalline of a living eye, by means of a good lamp and a convex lens, their substance appears cloudy and whitened, more cloudy than the aqueous humor which separates them. This turbidity is best seen in the blue and violet rays of the spectrum, because it is then increased by the fluorescence. The name fluorescence is given to the power which certain substances possess of manifesting a feeble glimmer of their own (*propre*) when they are illuminated by the blue or violet rays.* The bluish glimmer of solutions of quinine, and the green glimmer of uranium glass, which is yellowish green, are produced by this cause. The fluorescence of the cornea and lens appears, indeed, to be caused by a small quantity of a substance analagous to quinine which is found in their tissue. This property of the lens is, doubtless, precious to the physiologist, because by concentrating the blue rays upon it he can make the lens visible in the living eye, and prove that it is in direct contact with the posterior part of the iris, which is contrary to the long established belief on this point. But the fluorescence of the cornea and the lens can only act unfavorably upon the vision.

However clear and transparent it may appear at the moment when we have extracted it from the eye of a recently killed animal, the lens is far from being homogeneous from an optical point of view. The shadows of the opacities and corpuscles contained in the eye, and known under the name of entoptical objects, may be made perceptible to the retina. It is sufficient for this purpose to look at a large, bright surface, as the sky, through a very small hole. The shadows of the fibres and spots of the lens appear everywhere in the images thus obtained. We see, also, all sorts of little fibres, corpuscles, and membranous folds, held in suspension in the vitreous humor, which, when they are situated near the retina, may sometimes appear to us during the ordinary use of the eye; in such cases we give them the name of muscæ volitantes because, when we wish to fix the sight upon them, these points follow the movements of the eye and consequently fly away from the point of fixation, which produces the same effect as if we saw a flying insect. There are objects of this kind in every eye; they generally float outside of the field of vision in the upper part of the eye ball, but they spread through the vitreous humor when this is agitated by any quick motion of the eye. They may sometimes settle in front of the fovea and thus obstruct the sight, It is characteristic of the way in which we observe our sensations, that persons who commence to suffer with their eyes are sometimes struck with this phenomenon which disturbs them as a new appearance, although this presence of these bodies in the vitreous was anterior to their disease.

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* According to Tyndall, fluorescence is the property which certain substances possees of becoming luminous when placed in the non-luminous, ultra-violet rays of the spectrum. Vide Tyndall's Notes on heat. No. 247, TRANS.

When we know the history of the development of the eye ball in the human embryo, and in the vertebrates generally, these irregularities in the structure of the lens and the vitreous humor explain themselves. A depression is formed in the external skin of the embryo, which afterwards deepens and becomes bottle shaped; finally the neck of the bottle is entirely closed. In this little closed sac the epidermic cells unite to form the substance of the lens; the skin itself forms its capsule, and the subcutaneous connective tissue makes the vitreous humor. The cicatrix of the occlusion of the sac is often still visible entoptically in the adult.

Finally, we must not pass in silence over certain irregularities of the fundus upon which the optical image of the eye is painted. In the first place there is a hiatus in the retina, not far from the middle of the field of vision, at the spot where the optic nerve penetrates the eye ball. At this place the whole substance of the membrane is formed of fibres of the optic nerve. The cones, the elements which are sensitive to light, are entirely wanting. For this reason the light which falls upon this spot is not perceived. To this hiatus in the mosaic of the cones—called the blind spot—there corresponds a region in the field of vision in which nothing is perceived. This hiatus is far from being insignificant; it measures 6° horizontally, and 8° vertically; its internal border the one nearest the point of fixation, is situated at the temporal side of this point and about 12° distant. The easiest way to observe the blind spot is well known. Mark upon a white paper, to the left a small cross, to the right, upon the same horizontal line, and about three inches distant, a round black spot, half an inch in diameter. Close the left eye, look steadily with the right at the little cross, and slowly approach the paper, held at first at a considerable distance. At the distance of about eleven inches the black spot will disappear; it re-appears when the paper is held closer. This hiatus is large enough to contain eleven moons placed in a horizontal line, or a human face six or seven feet distant. Mariotte, who discovered this phenomenon, amused Charles II. of England, and his courtiers, by showing them how two of them could mutually see each other without a head.

A certain number of long narrow hiatuses, in which we may lose the images of very small luminous points, (such as the fixed stars,) correspond to the large vascular trunks of the retina. The vessels are situated in the anterior layers of this membrane, and consequently throw their shadows upon the parts of the sensitive mosaic which are situated behind them. The largest trunks completely prevent the light from passing through them; the smaller ones at least, weaken it. Under certain conditions these shadows of the retinal vessels may appear in the field of vision. It suffices, for example, to look at the luminous surface of the sky through a small pinhole made in a card, to which we give a slight continuous motion to and fro. It is better still by means of a small lens, to concentrate the rays of the sun upon the sclerotic near the external angle of the eye, while one looks strongly inward. The vessels of which we are speaking are situated in the anterior layers of the retina; but as their shadows can be perceived only when they touch the layer truly sensitive to light, the experiment which we have just made proves that sensitiveness to light resides in the posterior layers of the retina. This phenomenon of vascular shadows has even enabled us to measure the distance which separates the sensitive from the vascular layers of the retina. When we move the focus of the concentrated light upon the sclerotic, the shadow upon the retina also moves, and the same thing takes place with the corresponding shadow in the visual field. It is easy to measure the amount of these movements, and it is by this means that Henri Muller, of Wurtzburg, too soon taken away from science, has calculated the distance of which we have spoken above, and has found it equal to that which separates the vascular layer and that of the cones.

There is a connection in which the place of clearest vision is distinguished in a disadvantageous manner; sensitiveness to feeble light is less here than in the rest of the retina. It has been known since the most ancient times that a certain number of feebly luminous stars, such as the Hair of Berenice and the Pleiades are seen more clearly when we turn the sight a little than when we look directly at them. It can be proved that this is due, in part, to the coloring of the yellow spot, the effect of which is to weaken especially the blue light; but the want of vessels at this point, a want of which we have already spoken, may contribute to it, because from it results an obstacle to the circulation of the blood.

All these irregularities would be unendurable in an artificial camera, or in the photographs furnished by this instrument. In the eye they annoy us so little that some of them have even been difficult to discover. If they do not interfere with the perception of external objects, this is not due solely to the fact that we see with both eyes, and that the deficiencies of one eye may be supplied by the other. In fact, even for monocular vision, and in those blind of one eye, the representation of the visual field is exempt from the troubles which the irregularities of the fundus of the eye might cause. The principal reason of it is in the perpetual motion of the eye, and in the circumstance that the defects occupy almost exclusively the parts of the field of vision to which we pay no attention.

If we notice with such difficulty the phenomena of which we have just spoken, and others, such as the accidental images of bright objects, (so long as they are not sufficiently strong to interfere with the perception of surrounding objects,) it is owing to a singularity of our perception which appears paradoxical, and which exists not alone in vision, but is always found in the other senses. The history of the discovery of these phenomena is well suited to show how difficult it is to lay hold of them. Some, such as the blind spot, have been discovered by theoretical speculations. The long discussion of the question, whether sensitiveness to light resides in the retina or in the choroid, led Mariotte to ask himself how this sensitiveness behaved at the spot where the choroid was lacking. The experiments which he undertook for this purpose led him to the discovery of the hiatus in the visual field. For thousands of years men had used their eyes; many had reflected upon the purposes and the mechanism of vision, and yet a whole series of circumstances was necessary for the discovery of a phenomenon so simple that it seems as though it should have been perfectly obvious. Instead of this, every one, who for the first time makes experiments upon blind spot, experiences a certain difficulty in holding the eyes motionless while turning the attention away from the point of fixation of the sight. It is only at the price of repeated experiments that the most skillful observer becomes able, while closing one eye, to recognize immediately the place in the visual field where the hiatus is found.

Other phenomena of the same kind have been discovered by chance, and this especially by men particularly endowed by nature with the faculty of observation which these researches demand. We name in the first rank, Goethe, Purkinje and Jean Muller. To recognize in one's own eyes a phenomenon already known is much easier than to discover it anew; nevertheless a great part of the phenomena which Purkinje describes have not been seen again by others, yet we cannot say with certainty that they were peculiar to the eyes of this eminent observer.

The phenomena of which we have just spoken, and many others, are governed by this general rule, that a change in the degree of irritation of a sensitive nerve is perceived much more easily than a constant and invariable irritation. As a consequence of this rule, the peculiarities in the irritation of certain fibres which are the me throughout life—as, for example, the vascular shadows in the eye, the yellow color of the centre of the retina, and the majority of the motionless entoptical objects—entirely escape our attention, and in order to make them appear, it is necessary to have recourse to an unusual illumination, whose direction, moreover, it is useful to continually vary.

According to what we know at present of irritation of nerves, it appears to me scarcely probable that we have to do here with a phenomenon of sensation merely; I believe, rather, that it is a phenomenon of observation. It suffices to have noticed this here, for the solution of the questions which we meet on our way will find its place farther on.

We will not dwell longer on the physical functions of the eye. If I should be asked why I have said so much of its imperfections, I would answer that this has not been to depreciate this little organ and defraud it of the admiration which it deserves. My chief desire was simply to demonstrate first and foremost, that it is not to the mechanical perfection of the organs of the senses that the fidelity and marvelous accuracy of the impressions which they furnish must be attributed. The next part of this work will show still bolder and more paradoxical incongruities. We have now seen that the eye is not of itself so perfect an optical instrument as it appears, but that it renders us such good service only from the special manner in which we use it. Its perfection is purely practical, and by no means absolute; it does not consist in the fact that every defect is avoided, but that the defects do not hinder its most useful and varied applications.

In this relation the study of the eye enables us to investigate deeply the character of organic perfection in general, and the interest of these researches increases when they are placed in connection with the vast and bold ideas which Darwin has just introduced into science, relatively to the character of the progressive development of the organs. Wherever we study organic formations, we encounter the same character of adaptation to the end to be attained, but it is perhaps in the eye that we can better than any where else, assure ourselves in detail that this is so. The eye contains all the defects which optical instruments present, and even some which we not tolerate in these instruments; but these defects are all kept would within such limits, that the inaccuracy which they cause in the image scarcely surpasses in the ordinary condition of illumination, the limit imposed on the acuteness of the perception by the delicacy of the cones, the elements sensitive to light. For all that we have observed to the contrary, under slightly different conditions we would notice the dispersion, the astigmatism, the hiatus, the vascular shadows, the imperfect transparency of the media, etc.

So we see the perfect adaptation of the eye to its purpose, and this is revealed even in the limits which are set to its defects. That which the labor of an innumerable succession of generations has been able to produce under the influence of Darwin's law of descent is doubtless here joined to a work created by infinite Wisdom. A reasonable man will not take a razor to chop wood; so we may allow that each useless refinement in the optical construction of the eye would have rendered this organ more delicate, and slower in its development. Neither should we forget that the animal tissues, soft and full of water, are unpromising materials for the construction of an instrument of physics.

This state of things is the reason why perception only occurs clearly and without obstacle in turning the eye about the field of vision in the way to which we have alluded, a circumstance whose importance will be shown subsequently. We will also speak further on of other circumstance which act in the same direction.

Up to this point we do not appear to have made much progress in the question of how vision takes place. All that we have learned is how the optical apparatus unravels the light which comes to it from the different points of the field of vision, and distributes it so as to deliver to one single sensitive fibre all that proceeds from one single external point.

Let us see now if what we know of the sensations of the eye will bring us nearer to the solution of this problem.

[TO BE CONTINUED.]

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ART. III.—*On the employment of Taxis in Strangulated Hernia.*

By C. C. F. GAY, M. D.

MR. PRESIDENT AND GENTLEMEN:

Having observed the progress of several cases of strangulated hernia, during the past eighteen months, in which taxis was successfully employed, I have thought the observation of sufficient urine per diem. He is now passing four and five quarts. He was admitted to the Hospital on the 8th of Oct., and since that time has kept constantly to his bed. He is much emaciated, having lost thirty or more pounds.

Diabetes is a disorder in which, with an unusual amount of urinary secretion there is also found in the urine a variable quantity of sugar. This is grape sugar, existing as I have said in variable quantity, some patients will produce one pound, others a pound and a half, and others even two pounds per diem. Besides being in the urine, sugar exists to a greater or less extent in the other secretions and excretions of those having diabetes, as in the saliva, fæces, etc., although this fact has been denied by some physiologists. Diabetes is attended by general debility, great thirst, and red tongue, as you have observed in the young man alluded to. The pulse is variable and unusually slow. In the case of the young man it is but 60 per minute, which is very slow for a youth of nineteen. In Diabetes the skin is dry and almost always cold.

There has been a great amount of ingenuity put forth to ascertain the cause of this disease. When first noticed it was supposed to be a disease of the kidneys. This, it is unnecessary for me to tell you, is not so. It is not a renal disease. After existing for a year or more, diabetes may cause what is termed degeneration of the kidneys, but it, of itself is not a renal disorder.

In an analysis of blood of diabetic patients, sugar is not found permiating the arterial blood. It is not found in the Portal vein, but is found in the Hepathic. It is found in ascending vena cava but not in descending vena cava. It was discovered that on irritating that portion of the brain under the fourth ventricle, sugar was immediately produced in the urine. On ligating the pneumogastric nerve, sugar was no longer found in the urine, but on irritating the brain under the fourth ventricle it was again produced.

It must not be supposed that because sugar exists in the urine that the patient has diabetes, but when the sugar is present permanently and in considerable quantities, it is then indicative of diabetes. The urine of diabetes has great specific gravity, that in this case being 1032, water being 1000. The smell of the urine is like that of new mown hay, and in many cases the odor arising from

Diabetic patients has a sacharine and sickening character. The tests for sugar in the urine which I propose to show you to-day are two in number. The first is called Trommer's test; after adding a few drops of solution of sulphate of copper, pour into the urine in the test tube about half its bulk of liquor potassa. On heating the urine passes from blue to a beautiful green color, and thence to a yellow and dark brown color. The oxide of copper is precipitated. The second test consists in boiling the urine with an equal amount of liquor potassa. The mixture becomes as dark as molasses.

Diabetes proves more rapidly fatal in younger patients. If they do not die from some other disease against which they are not able to cope, they sink from exhaustion produced by the drain on the system. Pulmonary Tuberculosis is very apt to ensue in Diabetic patients.

Knowing that an abundant amount of sugar is being eliminated from the system, the treatment would consist largely in excluding those articles of diet containing sugar and starch. Nearly all kinds of vegetables and fruits are to be withheld, and articles of food consisting wholly or in part of wheat flour, if partaken of at all are to be used with discretion.

Eggs, meat, milk, articles the opposite of those just mentioned are to be used. Some cases have been reported as cured in this manner, but the number is few, the majority being relieved but for a time. Creasote has been recommended. This patient has been taking one drop three times daily.

Strychina has been used with great benefit in connection with simple and proper diet. This patient has been placed on milk diet which has been used in the past few years with marked benefit. An exclusive diet of this kind becomes tiresome and disagreeable, and care should be taken to vary the articles of food prepared from it as much as possible.

In connection with this, the patient is taking the following:

℞ Strychnia, gr. i.
Acid Aceteci, q. s.
Water, ℥ iiss.
M One teaspoonful ter in die.

Delirium Tremens.—You will doubtless, Gentlemen, remember the patient whom you saw a few days since suffering from an attack of Delirium Tremens. When you saw him he was jocose and seemed in high spirits, but in the course of the afternoon he became wild and delirious, and was with difficulty managed, imagining himself tormented by all sorts of objects both natural and supernatural.

There is not, comparatively, as much Delirium Tremens as formerly, owing no doubt to a diminished consumption of alcohol. The beverage more universally employed by laboring men being beer, containing a less quantity of alcohol. This, if any stimulant at all is needed, which undoubtedly is not the case, is a benefit to the consumers of this beverage.

In the consideration of Delirium Tremens you have to distinguish between two varieties. The first is the Tremulous or Delirium Tremens proper. The second, or Mania a potu, is that variety which is brought on by a continued debauch. It is associated with prominent symptoms, flushed face, contracted pupil, and great nervous excitement. Delirium Tremens is developed in men who have been in a habit of drinking and who try to break it off. It is also induced in persons who have been moderate drinkers but who have received some severe shock, as fracture of the leg.

The treatment of this class of patients would not be so diverse if these differences in their character were more carefully noted. Persons suffering from Mania a potu are extremely excited and imagine some person or thing pursuing them, and under this hallucination will rush violently from the room or dash themselves headlong from the window unless carefully guarded. Not long since a man in this city imagining himself pursued by some men wishing to take his life, came into a saloon and asked protection. In a few moments he started up again, and passing out into the street stabbed a man whom he had never known or spoken to, to the heart.

Formerly persons suffering in this manner came to the Hospitals and were given opium and a small amount of alcoholic stimulant. This plan of treatment is mistaken. They should be placed in a moderately lighted and pleasant room where quiet can be insured, and given good light food. If this does not have the desired effect give as a purgative ten or twelve grains of calomel and a saline cathartic.

Sailors have a method of treating comrades suffering in this way by walking the subject between two of their number until he sleeps from physical exhaustion, but a mistake is some times made and the weak and tremulous sufferer from Delirium Tremens is made to walk in this way much to his detriment.

If purgatives do not have the desired effect give an anodyne, give a good dose of opium, or two or three grains of opium with a glass of whisky. Bromide of Pottassium seems to have, in some cases, a very happy effect; when they have taken twenty or thirty grains, you will often find the delirium has passed off and they awake with a good appetite.

In that form where exhaustion is the principal symptom we often find it beneficial to give a little stimulous with, perhaps, a little bitter infusion as Gentian, Columbo or Quassia, then give an anodyne.

The new anæsthetic, Hydrate of Chloral, is almost a specific in these cases in doses of fifteen or twenty grains; the patient wakes up with no nausea or headache, and perhaps with appetite. But you will often be disappointed to find that your patient will, during the day, have a return of his delusion, and you will, in some cases, be obliged to repeat your dose once in two or three hours. It is better and safer to give small repeated, rather than large single or large repeated doses. Deaths have often occurred from large doses of Hydrate of Chloral. It is a drug which is to be used with extreme caution.

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ART. V.—*Case of Fracture of the Skull.* By CHARLES W. SAUNDERS, M. D. Belfast, N. Y.

At midnight on the 27th of August last, I was called into the town of Lynden, twenty miles distant, to the bedside of an only son, five years of age, of a clergyman of this place, who just at evening of that day was kicked by a horse squarely in the forehead, fracturing the frontal bone horizontally just over the orbits entirely across, and remaining attached in this extent, broke away above in an eliptical form one and one-half inches above the lower fracture, reaching back into the brain substance, this upper margin being depressed one and one-half inches, rupturing the brain largely, about one ounce of which was detached.

I arrived at three o'clock in the morning with my student, Mr. Hopper, meeting Dr. R. Y. Charles, of Rushford, who was faithfully administering to the child's relief. With their assistance, the little fellow being chloroformed, I proceeded to elevate the depressed plate, removing any speculæ and broken down brain matter, so that the edges of bone were nicely in apposition when we dressed up the wound. Anæsthetic effect passing off the little fellow recovered his sense perfectly, which I should have said he had when we arrived, being perfectly conscious from soon after the receipt of the injury.

Dr. Charles took charge of the case; my brother, Dr. J. H. Saunders, and I visiting the patient several times with him thereafter. The little fellow continued to maintain his senses and do reasonably well for about four weeks, after which time he gradually became more irritable, emaciated, and died of gradual exhaustion about eight weeks from the receipt of the injury, having his his senses until near the last, no paralysis being developed. Death seemed to be the passive result of the withdrawal of so much vital force consequent upon the loss of so much brain substance.

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Editorial.

Medical Society of the State of New York.

The Society met on Tuesday, February 6th, at Albany. The meeting being called to order by the President, Dr. William C. Wey, of Elmira. Prayer was offered by Rev. Dr. Snively, which was followed by the President's Inaugural Address. He spoke of medical fellowship and the importance of medical ethics, suggesting it as a branch of medical education in schools. He referred to the tardy publication of the transactions, and of the rule adopted last year of allowing papers to be published in the Medical Journals. He suggested action to obtain room for the Annual Meetings of the Society in the new Capitol. He also referred to the spirit shown by physicians to prevent action by Medical Societies by appeal to the courts, and said that a course so subversive of morals and justice should be promptly met by prompt expulsion of the offender, and a cessation of social and professional relations with him. He urged the necessity of a law to protect from loss, physicians wrongfully prosecuted for malpractice on account of the irresponsible character of the plaintiff.

After paying a compliment to the medical literature of the State the address was closed by alluding to the only sad feature of the year the death of four prominent members, viz: Barnet B. Staats, of Albany, Andrew Van Dyck, of Oswego, Erastus L. Hart, of Elmira, and Henry D. Buckley, of New York. The inaugural was suggestive, well chosen and appropriate, and was listened to with much attention.

After the transaction of miscellaneous business Dr. Elliot, of New York, presented, in behalf of Dr. Sayer, a draft of a bill to be presented to the Legislature for the protection of physicians and surgeons in cases of alleged malpractice. The following papers were read; On Transitory Mania, by Dr. Cook, of Canandaigua, Objects of Medical Legislation, by Dr. Rogers, Chronic Cystitis, by Dr. Emmet, of New York. Chronic Inversion of the Uterus, by Dr. White, of Buffalo, Ophthalmic Cases, by Dr. Rider, of Rochester, and Surgery of Childhood, by Dr. Pooley, of Westchester. This closed the business of the day sessions, and not being able to attend the evening meeting we are unable to give any notice of the proceedings.

2nd day. The time of the morning was largely occupied by miscellaneous business. Dr. E. P. Gray, of Utica, read a very instructive paper on the Causation of Insanity, the following being a brief abstract:

He endeavored to prove the physical causation of insanity, first, by analogy. Infirmity or instability of elements is a predisposing cause of disease. This is especially true of nerve tissue, hence heredity is an important element of causation in insanity. This is a disease of the body and not of the mind.

He showed the insufficiency of moral causes to produce the mental disorder, except as they induce temper or prevent pathological changes, and that physical disease is a necessary factor. That age and sex are predisposing causes only when physiological processes are changed to pathological He spoke of the different theories of the origin of mind and its relation to the body, and in brief of mania transitoria or impulsive insanity.

In conclusion, and as showing the fact that physical causation is recognized by the most skilled and competent observers, he gave the classification of insanity as recommended by the Medico-Psychological Society of London and the International Congress of Alienists, which is based entirely upon this theory.

A lengthy report upon medical education was read by Dr. Squibb, and resolutions passed. The attractions of this day's proceedings were vested mainly in the President's Annual Address, and the banquet given at the Delevan House by the following gentlemen: Thomas Hun, M. D., J. V. P. Quackenbush, M. D., John Swinburne, M. D., Wm. H. Bailey, M. D., Chas. A. Robertson, M. D., W. C. Wey, M. D., Chas. H. Porter, M. D., J. R. Boulware, M. D., Levi Moore, M. D., Joseph Lewi, M. D., S. O. Vanderpoel, M. D., Wm. H. Craig, M. D., Edward R. Hun, M. D., Jacob S. Mosher, M. D., Amos Fowler, M. D.

A paper on Phonation by Dr. Moore, of Rochester, and a paper on Extra

Uterine Fœtation, by Dr. Jewett, of Canandaigua, we expect to publish in full in our Journal.

There were many valuable papers, and highly interesting discussions, which we are at present unable to even mention.

The meeting was of unusual interest, and every member appeared gratified and instructed. The Society are under many obligations to its officers who were eminently successful in conducting its affairs successfully and pleasantly.

The following is a partial report of the committee on nominations for the ensuing year, which was adopted:

President—Cornelius R. Agnew.

Vice-President—B. F. Sherman.

Secretary—Wm. H. Bailey.

Treasurer—Charles H. Porter.

For Censors—Southern District: Edward R. Squibb, Samuel T. Hubbard, H. C. Husted. Eastern District: James L. Babcock, P. McNaughton, C. C. Covell. Middle District: M. M. Bagg, Horace Lathrop, Charles G. Bacon Western District: J. F. Miner, C. C. Wyckoff, D. Colvin.

Permanent Members—First District: Nathan Bozeman, James L. Little. Second District: M. R. Holbrook, A. C. Hull. Third District: Leroy McLean, P. V. S. Pruyn. Fourth District: Arthur S. Wolf, Henry H. Green. Fifth District: G. L. Halsey, Edwin Hutchinson. Sixth District: Joshua B. Graves, J. H. Squire. Seventh District: C. G. Pomeroy, C. C. Murphy. Eighth District: Charles E. Rider.

For Honorary Members—M. Nelaton, Rudolph Virchow.

Eligible for Honorary Membership—Lewis Oakley, Elizabeth, N. J.; Charles H. Hewitt, Red Wing, Minn.; J. M Toner, Washington, D. C.; Joseph B. Brown, U. S. A.

For the Degree of M. D.—Cornelius H. Schaaps, Brooklyn; Wm. Lamont, Schoharie.

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Annual Commencement of the Medical Department of the University of Buffalo.

The graduating class received their examination before the Curators Tuesday morning, February 20th, which was concluded to the entire satisfaction of all. After the examination was closed all retired to the Hall where a bounteous repast was awaiting them, which was partaken of by all amid general good cheer. At the conclusion of the dinner speeches were made by some of the Professors and Curators. Dr. T. D Strong, of Westfield, President of the Alumni, made a few well chosen remarks to the graduating class, he also reported progress in ascertaining the residences and particulars concerning the Alumni, as the Secretary, Dr. W. W. Miner, was unable to be present. At the conclusion of Dr. Strong's remarks the resignation of Dr

W. W. Miner as Secretary was read and reluctantly accepted. Dr. W. C. Phelps, of the class of 1866, was elected to fill his place, Dr. Strong being unanimously re-elected as President.

At half past seven o'clock the graduating class entered St. James Hall and took seats immediately in front of the stage, which was occupied by Hon. Millard Fillmore, Chancellor of the University, the Faculty and a large number of the Curators and Council of the University, Rt. Rev. A. C. Coxe, and Rev. Wolcott Calkins. Wahle's orchestra was in attendance, and pleasantly varied the exercises with music.

The opening prayer was made by Bishop Coxe, at the conclusion of which Prof. Miner read the following report of the proceedings of the Council:

By recommendation of the Faculty and Curators, the Council of the University have this day voted to confer the degree of Doctor in Medicine upon the following gentlemen:

George Washington Earle,	DeRuyter, Madison Co., N. Y.
George Rightmire,	Jacksonville, Tompkins Co., N. Y.
Elwood Daniel Meeder,	Westfield, Chautauque, Co., N. Y.
Peter Manuel Wise,	Clarence, Erie Co., N. Y.
Franz Emil Louis Brecht,	Buffalo, Erie Co., N. Y.
John Sandford Halbert,	Buffalo, Erie Co., N. Y.
Don J. Lathrop,	Elma, Erie Co., N. Y.
William Montgomery Mercer,	Corunna, DeKalb Co., Ind.
Edwin Ruthven Johnston,	Dresden, Ontario.
Fairfield Snyder,	West Sparta, Livingston Co., N. Y.
Horace Grant Hopkins,	Williamsville, Erie Co., N. Y.
Justinian K. Piersol,	Adrian, Lenawee Co., Mich.
John Sardis Stearns,	Andover, Allegany Co., N. Y.
Isaac Eugene Bennett,	Angellica, Allegany Co., N. Y.
Frank Herman Moyer,	Mount Morris, Livingston Co., N. Y.
Henry Wilson,	Westfield, Chautauqua Co., N. Y.
William Mason Boddy,	Wethersfield, Wyoming Co., N. Y.
Charles T. Dildine,	Dansville, Livingston Co., N. Y.
Maxwell G. Walkinshaw,	Batavia, Genesee Co., N. Y.
William C. Raymond,	Cambria, Niagara Co., N. Y.
Ziba Hoyt Evans,	Ransomville, Niagara Co., N. Y.
Charles Benjamin Knowlton,	Buffalo, Erie Co., N. Y.
Edward Mulheron,	Canandaigua, Ontario Co., N. Y.
Peter Worp Van Peyma,	Lancaster, Erie Co., N. Y.
Harley Leonard Atwood,	Collins Centre, Erie Co., N. Y.
Robert Hebenstreit,	Buffalo, Erie Co., N. Y.
Robert Woolston Smith,	Shelby, Orleans Co., N. Y.
Cassius Wallace Gould,	Batavia, Genesee Co., N. Y.
David Vacton Stranahan, Jr.,	Warren, Warren Co., Pa.
William Albert Wasson,	Buffalo, Erie Co., N. Y.

urine per diem. He is now passing four and five quarts. He was admitted to the Hospital on the 8th of Oct., and since that time has kept constantly to his bed. He is much emaciated, having lost thirty or more pounds.

Diabetes is a disorder in which, with an unusual amount of urinary secretion there is also found in the urine a variable quantity of sugar. This is grape sugar, existing as I have said in variable quantity, some patients will produce one pound, others a pound and a half, and others even two pounds per diem. Besides being in the urine, sugar exists to a greater or less extent in the other secretions and excretions of those having diabetes, as in the saliva, fæces, etc., although this fact has been denied by some physiologists. Diabetes is attended by general debility, great thirst, and red tongue, as you have observed in the young man alluded to. The pulse is variable and unusually slow. In the case of the young man it is but 60 per minute, which is very slow for a youth of nineteen. In Diabetes the skin is dry and almost always cold.

There has been a great amount of ingenuity put forth to ascertain the cause of this disease. When first noticed it was supposed to be a disease of the kidneys. This, it is unnecessary for me to tell you, is not so. It is not a renal disease. After existing for a year or more, diabetes may cause what is termed degeneration of the kidneys, but it, of itself is not a renal disorder.

In an analysis of blood of diabetic patients, sugar is not found permiating the arterial blood. It is not found in the Portal vein, but is found in the Hepathic. It is found in ascending vena cava but not in descending vena cava. It was discovered that on irritating that portion of the brain under the fourth ventricle, sugar was immediately produced in the urine. On ligating the pneumogastric nerve, sugar was no longer found in the urine, but on irritating the brain under the fourth ventricle it was again produced.

It must not be supposed that because sugar exists in the urine that the patient has diabetes, but when the sugar is present permanently and in considerable quantities, it is then indicative of diabetes. The urine of diabetes has great specific gravity, that in this case being 1032, water being 1000. The smell of the urine is like that of new mown hay, and in many cases the odor arising from

Diabetic patients has a sacharine and sickening character. The tests for sugar in the urine which I propose to show you to-day are two in number. The first is called Trommer's test; after adding a few drops of solution of sulphate of copper, pour into the urine in the test tube about half its bulk of liquor potassa. On heating the urine passes from blue to a beautiful green color, and thence to a yellow and dark brown color. The oxide of copper is precipitated. The second test consists in boiling the urine with an equal amount of liquor potassa. The mixture becomes as dark as molasses.

Diabetes proves more rapidly fatal in younger patients. If they do not die from some other disease against which they are not able to cope, they sink from exhaustion produced by the drain on the system. Pulmonary Tuberculosis is very apt to ensue in Diabetic patients.

Knowing that an abundant amount of sugar is being eliminated from the system, the treatment would consist largely in excluding those articles of diet containing sugar and starch. Nearly all kinds of vegetables and fruits are to be withheld, and articles of food consisting wholly or in part of wheat flour, if partaken of at all are to be used with discretion.

Eggs, meat, milk, articles the opposite of those just mentioned are to be used. Some cases have been reported as cured in this manner, but the number is few, the majority being relieved but for a time. Creasote has been recommended. This patient has been taking one drop three times daily.

Strychina has been used with great benefit in connection with simple and proper diet. This patient has been placed on milk diet which has been used in the past few years with marked benefit. An exclusive diet of this kind becomes tiresome and disagreeable, and care should be taken to vary the articles of food prepared from it as much as possible.

In connection with this, the patient is taking the following:

℞ Strychnia, gr. i.
Acid Aceteci, q. s.
Water, ℥ iiss.
M One teaspoonful ter in die.

Delirium Tremens.—You will doubtless, Gentlemen, remember the patient whom you saw a few days since suffering from an attack of Delirium Tremens. When you saw him he was jocose and seemed in high spirits, but in the course of the afternoon he became wild and delirious, and was with difficulty managed, imagining himself tormented by all sorts of objects both natural and supernatural.

There is not, comparatively, as much Delirium Tremens as formerly, owing no doubt to a diminished consumption of alcohol. The beverage more universally employed by laboring men being beer, containing a less quantity of alcohol. This, if any stimulant at all is needed, which undoubtedly is not the case, is a benefit to the consumers of this beverage.

In the consideration of Delirium Tremens you have to distinguish between two varieties. The first is the Tremulous or Delirium Tremens proper. The second, or Mania a potu, is that variety which is brought on by a continued debauch. It is associated with prominent symptoms, flushed face, contracted pupil, and great nervous excitement. Delirium Tremens is developed in men who have been in a habit of drinking and who try to break it off. It is also induced in persons who have been moderate drinkers but who have received some severe shock, as fracture of the leg.

The treatment of this class of patients would not be so diverse if these differences in their character were more carefully noted. Persons suffering from Mania a potu are extremely excited and imagine some person or thing pursuing them, and under this hallucination will rush violently from the room or dash themselves headlong from the window unless carefully guarded. Not long since a man in this city imagining himself pursued by some men wishing to take his life, came into a saloon and asked protection. In a few moments he started up again, and passing out into the street stabbed a man whom he had never known or spoken to, to the heart.

Formerly persons suffering in this manner came to the Hospitals and were given opium and a small amount of alcoholic stimulant. This plan of treatment is mistaken. They should be placed in a moderately lighted and pleasant room where quiet can be insured, and given good light food. If this does not have the desired effect give as a purgative ten or twelve grains of calomel and a saline cathartic.

Sailors have a method of treating comrades suffering in this way by walking the subject between two of their number until he sleeps from physical exhaustion, but a mistake is some times made and the weak and tremulous sufferer from Delirium Tremens is made to walk in this way much to his detriment.

If purgatives do not have the desired effect give an anodyne, give a good dose of opium, or two or three grains of opium with a glass of whisky. Bromide of Pottassium seems to have, in some cases, a very happy effect; when they have taken twenty or thirty grains, you will often find the delirium has passed off and they awake with a good appetite.

In that form where exhaustion is the principal symptom we often find it beneficial to give a little stimulous with, perhaps, a little bitter infusion as Gentian, Columbo or Quassia, then give an anodyne.

The new anæsthetic, Hydrate of Chloral, is almost a specific in these cases in doses of fifteen or twenty grains; the patient wakes up with no nausea or headache, and perhaps with appetite. But you will often be disappointed to find that your patient will, during the day, have a return of his delusion, and you will, in some cases, be obliged to repeat your dose once in two or three hours. It is better and safer to give small repeated, rather than large single or large repeated doses. Deaths have often occurred from large doses of Hydrate of Chloral. It is a drug which is to be used with extreme caution.

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ART. V.—*Case of Fracture of the Skull.* By CHARLES W. SAUNDERS, M. D. Belfast, N. Y.

At midnight on the 27th of August last, I was called into the town of Lynden, twenty miles distant, to the bedside of an only son, five years of age, of a clergyman of this place, who just at evening of that day was kicked by a horse squarely in the forehead, fracturing the frontal bone horizontally just over the orbits entirely across, and remaining attached in this extent, broke away above in an eliptical form one and one-half inches above the lower fracture, reaching back into the brain substance, this upper margin being depressed one and one-half inches, rupturing the brain largely, about one ounce of which was detached.

I arrived at three o'clock in the morning with my student, Mr. Hopper, meeting Dr. R. Y. Charles, of Rushford, who was faithfully administering to the child's relief. With their assistance, the little fellow being chloroformed, I proceeded to elevate the depressed plate, removing any speculæ and broken down brain matter, so that the edges of bone were nicely in apposition when we dressed up the wound. Anæsthetic effect passing off the little fellow recovered his sense perfectly, which I should have said he had when we arrived, being perfectly conscious from soon after the receipt of the injury.

Dr. Charles took charge of the case; my brother, Dr. J. H. Saunders, and I visiting the patient several times with him thereafter. The little fellow continued to maintain his senses and do reasonably well for about four weeks, after which time he gradually became more irritable, emaciated, and died of gradual exhaustion about eight weeks from the receipt of the injury, having his his senses until near the last, no paralysis being developed. Death seemed to be the passive result of the withdrawal of so much vital force consequent upon the loss of so much brain substance.

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Editorial.

Medical Society of the State of New York.

The Society met on Tuesday, February 6th, at Albany. The meeting being called to order by the President, Dr. William C. Wey, of Elmira. Prayer was offered by Rev. Dr. Snively, which was followed by the President's Inaugural Address. He spoke of medical fellowship and the importance of medical ethics, suggesting it as a branch of medical education in schools. He referred to the tardy publication of the transactions, and of the rule adopted last year of allowing papers to be published in the Medical Journals. He suggested action to obtain room for the Annual Meetings of the Society in the new Capitol. He also referred to the spirit shown by physicians to prevent action by Medical Societies by appeal to the courts, and said that a course so subversive of morals and justice should be promptly met by prompt expulsion of the offender, and a cessation of social and professional relations with him. He urged the necessity of a law to protect from loss, physicians wrongfully prosecuted for malpractice on account of the irresponsible character of the plaintiff.

After paying a compliment to the medical literature of the State the address was closed by alluding to the only sad feature of the year the death of four prominent members, viz: Barnet B. Staats, of Albany, Andrew Van Dyck, of Oswego, Erastus L. Hart, of Elmira, and Henry D. Buckley, of New York. The inaugural was suggestive, well chosen and appropriate, and was listened to with much attention.

After the transaction of miscellaneous business Dr. Elliot, of New York, presented, in behalf of Dr. Sayer, a draft of a bill to be presented to the Legislature for the protection of physicians and surgeons in cases of alleged malpractice. The following papers were read; On Transitory Mania, by Dr. Cook, of Canandaigua, Objects of Medical Legislation, by Dr. Rogers, Chronic Cystitis, by Dr. Emmet, of New York. Chronic Inversion of the Uterus, by Dr. White, of Buffalo, Ophthalmic Cases, by Dr. Rider, of Rochester, and Surgery of Childhood, by Dr. Pooley, of Westchester. This closed the business of the day sessions, and not being able to attend the evening meeting we are unable to give any notice of the proceedings.

2nd day. The time of the morning was largely occupied by miscellaneous business. Dr. E. P. Gray, of Utica, read a very instructive paper on the Causation of Insanity, the following being a brief abstract:

He endeavored to prove the physical causation of insanity, first, by analogy. Infirmity or instability of elements is a predisposing cause of disease. This is especially true of nerve tissue, hence heredity is an important element of causation in insanity. This is a disease of the body and not of the mind.

He showed the insufficiency of moral causes to produce the mental disorder, except as they induce temper or prevent pathological changes, and that physical disease is a necessary factor. That age and sex are predisposing causes only when physiological processes are changed to pathological He spoke of the different theories of the origin of mind and its relation to the body, and in brief of mania transitoria or impulsive insanity.

In conclusion, and as showing the fact that physical causation is recognized by the most skilled and competent observers, he gave the classification of insanity as recommended by the Medico-Psychological Society of London and the International Congress of Alienists, which is based entirely upon this theory.

A lengthy report upon medical education was read by Dr. Squibb, and resolutions passed. The attractions of this day's proceedings were vested mainly in the President's Annual Address, and the banquet given at the Delevan House by the following gentlemen: Thomas Hun, M. D., J. V. P. Quackenbush, M. D., John Swinburne, M. D., Wm. H. Bailey, M. D., Chas. A. Robertson, M. D., W. C. Wey, M. D., Chas. H. Porter, M. D., J. R. Boulware, M. D., Levi Moore, M. D., Joseph Lewi, M. D., S. O. Vanderpoel, M. D., Wm. H. Craig, M. D., Edward R. Hun, M. D., Jacob S. Mosher, M. D., Amos Fowler, M. D.

A paper on Phonation by Dr. Moore, of Rochester, and a paper on Extra

Uterine Fœtation, by Dr. Jewett, of Canandaigua, we expect to publish in full in our Journal.

There were many valuable papers, and highly interesting discussions, which we are at present unable to even mention.

The meeting was of unusual interest, and every member appeared gratified and instructed. The Society are under many obligations to its officers who were eminently successful in conducting its affairs successfully and pleasantly.

The following is a partial report of the committee on nominations for the ensuing year, which was adopted:

President—Cornelius R. Agnew.

Vice-President—B. F. Sherman.

Secretary—Wm. H. Bailey.

Treasurer—Charles H. Porter.

For Censors—Southern District: Edward R. Squibb, Samuel T. Hubbard, H. C. Husted. Eastern District: James L. Babcock, P. McNaughton, C. C. Covell. Middle District: M. M. Bagg, Horace Lathrop, Charles G. Bacon Western District: J. F. Miner, C. C. Wyckoff, D. Colvin.

Permanent Members—First District: Nathan Bozeman, James L. Little. Second District: M. R. Holbrook, A. C. Hull. Third District: Leroy McLean, P. V. S. Pruyn. Fourth District: Arthur S. Wolf, Henry H. Green. Fifth District: G. L. Halsey, Edwin Hutchinson. Sixth District: Joshua B. Graves, J. H. Squire. Seventh District: C. G. Pomeroy, C. C. Murphy. Eighth District: Charles E. Rider.

For Honorary Members—M. Nelaton, Rudolph Virchow.

Eligible for Honorary Membership—Lewis Oakley, Elizabeth, N. J.; Charles H. Hewitt, Red Wing, Minn.; J. M Toner, Washington, D. C.; Joseph B. Brown, U. S. A.

For the Degree of M. D.—Cornelius H. Schaaps, Brooklyn; Wm. Lamont, Schoharie.

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Annual Commencement of the Medical Department of the University of Buffalo.

The graduating class received their examination before the Curators Tuesday morning, February 20th, which was concluded to the entire satisfaction of all. After the examination was closed all retired to the Hall where a bounteous repast was awaiting them, which was partaken of by all amid general good cheer. At the conclusion of the dinner speeches were made by some of the Professors and Curators. Dr. T. D Strong, of Westfield, President of the Alumni, made a few well chosen remarks to the graduating class, he also reported progress in ascertaining the residences and particulars concerning the Alumni, as the Secretary, Dr. W. W. Miner, was unable to be present. At the conclusion of Dr. Strong's remarks the resignation of Dr

W. W. Miner as Secretary was read and reluctantly accepted. Dr. W. C. Phelps, of the class of 1866, was elected to fill his place, Dr. Strong being unanimously re-elected as President.

At half past seven o'clock the graduating class entered St. James Hall and took seats immediately in front of the stage, which was occupied by Hon. Millard Fillmore, Chancellor of the University, the Faculty and a large number of the Curators and Council of the University, Rt. Rev. A. C. Coxe, and Rev. Wolcott Calkins. Wahle's orchestra was in attendance, and pleasantly varied the exercises with music.

The opening prayer was made by Bishop Coxe, at the conclusion of which Prof. Miner read the following report of the proceedings of the Council:

By recommendation of the Faculty and Curators, the Council of the University have this day voted to confer the degree of Doctor in Medicine upon the following gentlemen:

George Washington Earle,	DeRuyter, Madison Co., N. Y.
George Rightmire,	Jacksonville, Tompkins Co., N. Y.
Elwood Daniel Meeder,	Westfield, Chautauque, Co., N. Y.
Peter Manuel Wise,	Clarence, Erie Co., N. Y.
Franz Emil Louis Brecht,	Buffalo, Erie Co., N. Y.
John Sandford Halbert,	Buffalo, Erie Co., N. Y.
Don J. Lathrop,	Elma, Erie Co., N. Y.
William Montgomery Mercer,	Corunna, DeKalb Co., Ind.
Edwin Ruthven Johnston,	Dresden, Ontario.
Fairfield Snyder,	West Sparta, Livingston Co., N. Y.
Horace Grant Hopkins,	Williamsville, Erie Co., N. Y.
Justinian K. Piersol,	Adrian, Lenawee Co., Mich.
John Sardis Stearns,	Andover, Allegany Co., N. Y.
Isaac Eugene Bennett,	Angellica, Allegany Co., N. Y.
Frank Herman Moyer,	Mount Morris, Livingston Co., N. Y.
Henry Wilson,	Westfield, Chautauqua Co., N. Y.
William Mason Boddy,	Wethersfield, Wyoming Co., N. Y.
Charles T. Dildine,	Dansville, Livingston Co., N. Y.
Maxwell G. Walkinshaw,	Batavia, Genesee Co., N. Y.
William C. Raymond,	Cambria, Niagara Co., N. Y.
Ziba Hoyt Evans,	Ransomville, Niagara Co., N. Y.
Charles Benjamin Knowlton,	Buffalo, Erie Co., N. Y.
Edward Mulheron,	Canandaigua, Ontario Co., N. Y.
Peter Worp Van Peyma,	Lancaster, Erie Co., N. Y.
Harley Leonard Atwood,	Collins Centre, Erie Co., N. Y.
Robert Hebenstreit,	Buffalo, Erie Co., N. Y.
Robert Woolston Smith,	Shelby, Orleans Co., N. Y.
Cassius Wallace Gould,	Batavia, Genesee Co., N. Y.
David Vacton Stranahan, Jr.,	Warren, Warren Co., Pa.
William Albert Wasson,	Buffalo, Erie Co., N. Y.

Royal Ezra Cochrane, - - - - Waterport, Orleans Co., N. Y.
Laird N. Woods, - - - - - Wheatland, Mercer Co., Pa.
Nathan Porter Johnson, - - - Newfane, Niagara Co., N. Y.
Ahaz Daniel Robbins, - - - - Corning, Steuben Co., N. Y.

The Faculty and Curators deem a thesis upon "Forensic Medicine," by Charles Benjamin Knowlton, as worthy of honorable mention and publication. The following theses are also deemed worthy of honorable mention: "Acute Pneumonitis," by Elwood Daniel Meeder; "Conservatism in Surgery," by Franz Emil Louis Brecht; "Acute Articular Rheumatism," by Henry Wilson; "Hygiene and Stimulants in Fevers," by Justinian K. Piersol. Many others are of unusual merit, and all show commendable care and thought.

Succeeding the reading of the report of the Council, and after music by the orchestra, the graduates were summoned in detachments to the stage, where they received from the hands of the Chancellor, Hon. Millard Fillmore, their diplomas.

The address to the graduates was delivered by Prof. James P. White, and was listened to with attention and interest. The exercises were closed by the benediction, pronounced by Rev. Wolcott Calkins.

Rush Medical College.

We have received the annual announcement of the Rush Medical College, for the Spring Term of 1872. The term will begin Wednesday, March 6th, and will continue sixteen weeks to June 26th. Owing to the loss of the College building by the great fire the Faculty have secured the Lecture and Clinic Room of the Cook County Hospital, corner of Eighteenth and Arnold streets. Those desiring further information should address the Sec'y, C. T. Fenn, M. D., 1155 Michigan Avenue, Chicago.

A New Work by the late Prof. Dunglison.

Messrs. Lindsay & Blakiston announce that they will shortly publish a work entitled History of Medicine, by the late Prof. Robley Dunglison, M.D., L.L.D. collected and arranged from the original manuscript by his son Richard J Dunglison, M. D. This work will be looked forward to with interest and received with pleasure by the Medical Profession of the U. S. The book will no doubt contain much valuable information, and will doubtless be an interesting narrative of events in the History of Medicine, coming as it does from the able pen of Prof. Dunglison.

New Medical Journal.

There comes to us from across the continent an addition to our list of medical exchanges in the form of The Western Lancet, published at San Francisco, Cal. This journal is published by an association of Physicians who have selected Eustace Trenor, A. M., M. D., and Heman P. Babcock, M. D., as editors. The Journal is divided into six departments, each being under the supervision of a separate physician, but under the management of the editor. The number now before us gives promise of being the first of we hope many very good numbers, and shows the energy and intelligence of our brethren on the Pacifiic coast.

The National Medical Journal.

On account of a determination on the part of the publishers of this Journal to insert an article, which in the shape presented, was not deemed suitable by the editors, Drs. Busey and Lee, these gentlemen have retired from the charge of the Journal and the February No. will be issued under the entire control of the publishers.

Vermont Medical Journal.

J. M. Currier, M. D., of McIndoes Falls, Vermont, informs us that he will commence early in the year the publication of a Medical Journal under the above title. We wish the Dr. success in his new undertaking and shall look forward with interest to the appearance of the first number.

Books Reviewed.*

The Principles and Practice of Surgery. By John Ashhurst, M.D. 8 vo. p. p. 1011. Philadelphia, H. C. Lea, 1871.

Most practitioners of medicine and surgery actively engaged, particularly those residing in rural districts, require books less given to the free discussion of questions, than to statements respecting the pathology, diagnosis, and treatment of surgical affections " in as concise a manner as may be compatable with clearness, a condensed but comprehensive description of the Modes of Practice now generally employed." (Preface.)

The want of such a work, embracing the latest views in surgery being felt, it is not surprising that many were impatient of the delay in the appearance of this, as well as the work of Dr. Hamilton; and it may be confidently expected that two works on General Surgery, coming from such authority as these do will fully meet the demands, more particularly of the ordinary practitioner than of him who makes surgery more of a specialty, and who investigates with a scientific purpose.

The general plan of the work before us is similar to that adopted by Helmes, and Erichsen, and is divided only into chapters, XLVII in number, commencing with Inflammation, followed by general Operations, Minor Surgery, Amputations, Surgical Injuries, and Surgical Diseases. The author has availed himself of the writings of most of the "Masters of the Profession," and has also combined his own large experience in the Hospital of Philadelphia.

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* On account of the press of original matter several books remain until next month for Notice and Review.

The steps in the process of *Inflammation*, according to the author, after the application of the exciting cause, are respectively, change of functional activity, (first an increase which may be followed by a diminution); changes of nutrition, *followed by* determination of blood with blood changes, temporary hypertrophy (according to Virchow)—an enlargement of the cells of the affected part, to which most of the swelling is due—nerve changes; and formative changes, consisting in the deposit of lymph, serum and pus. In the production of lymph the views of John Hunter are discarded, and those of Virchow—that of proliferation of pre-existing cells of Cohnheim—of a transfer of the white corpuscles (wandering cells of Recklinghausen), and of Billroth—of the change of the intercellular substance of the connective tissue, are all accepted. The origin of pus cells is spoken of more doubtfully, and allusion is made to the theories of Virchow—proliferation of connective tissue corpuscles of Cohnheim—migration of white corpuscles through the vascular walls, and of Stricker, who acknowledges both sources, but thinks the increase is due to multiplication of the cells themselves.

Our author does not seem to be quite clear in regard to the precise time at which inflammation may be said to be established (although on p. 42 it is stated that all the symptoms should be present in a part in combination before the diagnosis can be properly made.) Thus, change of color (due to hyperæmia) is given as one of the first of the phenomena of the 1st stage; the deposit of lymph takes place in the 2d; and pus in the 3d. On p. 35 it is stated "acute hyperæmia of the mammary gland * * is sometimes with difficulty prevented from running into absolute inflammation." But on the same page, "hyperæmia" is ascribed as being "due to an increased attraction exerted by the tissues of the *inflamed* part" &c., and on p. 35 and 60 Simon is quoted, who says, "A part **receives more blood because it is *inflamed*." Again, on p. 59 "* The increased quantity of blood * is itself *caused by inflammation*." (Italics ours.) We suppose the author means the functional changes—a diminished vitality—invites the system to respond by sending more blood, instead of the presence of blood being the cause of the remaining steps in the process. Gross emphatically teaches that the deposit of lymph marks the actual occurrence of inflammation. It may be inferred, however, that Vichow[1] believes there is no exudation due to inflammation *per se.*, but deposit occurs from change in the condition of the affected part, though he admits the existence of exudation in inflammation of all *vascular* tissues.

The author does not consider inflammation a "disease" which is to be combated as such, but "a modification of natural processes" to be treated with due regard to the local and general condition of the patient. *Bleeding* is discarded as a cure of inflammation, but is useful in mechanically relieving the congestion of the vital part, and calomel and tartar emetic are only admitted for use in the best selected cases. We—like Meigs and Pepper, in the treatment of pneumonitis—"never felt sure it '(calomel)' was of any special service, and of latter years have abandoned it altogether," believing that the profession have already undergone too much rack and torture from former heroism in practice, and which is still taught and followed to some extent. *Opium* is said to be "of all single remedies probably the most useful" by promoting "physiological and functional rest." It may possibly exert a more important influence by arresting in some measure the process of osmosis [2] and cell hypertrophy. Timely support is found not to aggravate the morbid action.

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[1] Chance, Ed. p. 436.

In *Amputations*, Dr. Ashhurst recommends the use of the tourniquet, discarding the view advanced by some that it causes venous thrombosis and resulting pyæmia. After describing the different methods of operating, on p. 103 a short view of the *relative merits* of each is given, summing up as follows:

"If any general rule were to be given, I should say that the circular incision, or Teal's method" (rectangular) 'gives the best stumps in the forearm, the modified circular '(integumentary flap)' in the upper arm and the upper part of the thigh, the common double-flap operation immediately above and below the knee, the circular or lateral-flap in the lower part of the leg, and the oval operation (integumentary) 'at the joints.'" The relative merits of each are not discussed much, but on p. 101 we notice one remark in regard to skin flaps which we are somewhat inclined to question. "Apart from the danger of sloughing, which always attends these long skin flaps, unsupported by muscle, the resulting stump is not so serviceable," &c. Why the integuments are more likely to slough by being rounded into flaps than in the circular method we do not see, unless unequal in length. And in regard to the usefulness of the stump, it is said on p. 105 that most of the tissues change into a fibro-cellular mass, those portions which overlie the extremity of the bone being absorbed. [2] This being true, the value of the stump is about the same in either operation. Since with the muscular flap there is always more drainage and a tedious process of healing, subjecting the patient to greater risk than the circular or one of its modifications. Is it not manifest that the latter class should usually be employed? We think most army surgeons prefer the latter. In no place are skin flaps more desirable than below the knee, making them on either side, a little fuller above than below—not dividing the flap as far back as the cuff is to be skinned off. The Surgeon has five operations at the hip-joint to choose from without any tables showing relative merits. [3] Morton has collected 8 cases in which the operation is stated; of these, 6 were integumentary, and 2 muscular flap operations. Of the former, 4 recovered and 2 died, 1 of which died 12 days after the operation of secondary hæmorrhage;

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[1] Dis. of Children, p. 183. [2] V. Marshall's Physiology—Note by F. G. Smith, p. 613.

[2] See Gross' System of Surgery—Changes of the stump.

[3] Amer. Jour. Med Sciences, July 1866, p. 17.

of the latter, 1 recovered and 1 died. These results are much more favorable than in primary operations, but the weight of testimony is in favor of the integumentary operation, Dr. Morton himself entertaining that opinion. The article is concisely and plainly written, but we cannot but wish the author had been a little more explicit in recommending the abdominal tourniquet, and in giving the guides and keys to the articulations.

The chapters on *Injuries in General*, and *Gunshot Wounds*, are admirably handled, and the rules laid down for the treatment of the latter, though briefly discussed, are eminently practical and sound. Excision of the hip in recent gunshot injury is preferred to either amputation or expectancy. We infer, (though it is not clearly expressed) if the case has become secondary, the author thinks amputation affords the better chances for recovery.[1] The All cases of gunshot fractures wounding the knee joint require amputation. In wounds of the ankle joint gouging is admissible. Primary excision of the shoulder and elbow are recommended as preferable to amputation or expectancy, although the death-rate in excision of the latter joint is a little in excess of that in amputation. Excision of the femur is condemned. Excision is faintly assented to in the tibia or fibula separately, and humerus, and recommended in the radius and ulua separately. The author agrees with Mr. Erichsen and Prof. Hamilton in thinking the expectant treatment affords the patient a better chance of recovery in gunshot fractures of the upper third of the thigh, equal with amputation when at the middle, and less than amputation at the lower third. Some, however, think there is but little difference between the lower and upper part of the thigh as regards mortality from operations.[2] Primary operations when required give the patient the best chance, secondary next, and intermediate the last.

Notice is not made of Howard's (of N.Y.,) notion of wiring the ends of the bones together after resection, the treatment being frequently substituted for amputation, but he honors that gentleman by alluding to his treatment of chest wounds (gunshot) by hermetically sealing. The only case known to have recovered was only saved by re-opening the wound. (p. 358, from Circular No. 6, S. G. O.)

The manner in which the authors of impractical ideas are treated is exceedingly lenient throughout the work.

The different methods of arresting hemorrhage are discussed with due regard to each in its appropriate place. On p. 181 it is said "the ligature as now used, * * is when applicable, the very best method of checking arterial hemorrhage." And, on p. 182, "The best material for a ligature is * * ordinary fine whipcord or silk." Also, p. 183, "Metalic ligature thread * * * may properly be applied in cases in which it is desirable to leave the knot in *situ* and close the wound over it, as in certain operations upon the abdominal cavity: even in these cases, however, it is doubtful if the antiseptic short cut ligature of Prof. Lister would not answer a still better purpose."

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[1] The authors' views are more fully expressed in the Am. Jour. Med. Sciences for October 1869, p. 466, 467, in a Review of Otis on Excision of the Head of the Femur.

[2] See Review of Ashhurst's Ed. of Erichsen's Surgery by Geo. C. Blackman, M.D, in the Am. Jour. Med. Sciences for Jan 1870, p, 172.

Deligation of Special Arteries is hurridly passed over. On p. 203 ligation of the common femoral is said to be a "bad" operation, "and the external illiac should be always tied in preference." Some surgeons, both in this country [1] and in Europe, [2] do not hesitate to tie it, though Erichsen speaks boldly against it. The anterior operation for ligation of the primitive illiac only is given.

The chapters on *Fractures* and *Dislocations* in a work of this character, should, in our opinion, be a little more full, for it is a class of injuries with which all physicians have to deal, and all have not access to monographs. In separation of the epiphisis at the upper end of the humerus and fracture of its surgical neck, it is stated on p. 249, "the deformity, which is characteristic, * * consists in the upper end being drawn upwards, inwards, and forwards." Hamilton [3] thinks this is the position of the fragments in most cases, but mentions Dupuytren, Paletta, and others as having seen both fragments pushed outwards. We once heard a case, in a girl 10 years old, of supposed separation of the epiphisis with persistent displacement of the lower fragment and flattening below the acromion. We notice the omission of the important discovery of Dr. Moore, [4] of Rochester, N.Y., in fracture of the lower end of the radius. Dislocation of the ulna usually co-exists, with displacement of the tendon of the extensor carpi-ulnaris; and until these are restored to position, it is impossible to maintain reduction of the fragment of the fractured bone. A very full and satisfactory account of dislocation of the hip (after Bigelow) is given. The unaided hands of the Surgeon in nearly all cases of fracture and dislocation are sufficient to effect reduction. On p. 227 passive motion of the joints is recommended at the third or fourth week after fracture, and * even then * only with moderation and gentleness." Gross advises passive motion at the end of two weeks, and Hamilton [5] as early as the 7th or 8th day.

In treating *Injuries of the Head*, we think the author has hardly done himself justice, especially on *scalp wounds* in view of their frequency. His views of concussion are peculiar, thinking all except slight cases, are attended with a *bruising* of the brain, and some merge so nearly into compression that the difference cannot be determined—indeed, the conditions are identical. In discussing *trephining*, he treads on disputed soil, is very positive in his advice, and inconclusive in his arguments. We hope to be pardoned if we dissent from the author's views in regard to both *simple*, and *compound depressed fractures*. In both (if impacted in the latter) the operation is opposed even "if symptoms of compression are present." Gross advises the operation in these cases if there is any considerable depression, and while it is difficult to fix the

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[1] Gross' Syst. Surg. vol. 1, p. 945.
[2] Holmes Syst. Surg, London Ed.. vol. iii, p. 511.
[3] Fractures and Disl., 3d Ed., p. 225.
[4] See Med. Record for April 1870, also Hamilton, 4th Ed. Fractures and Dislocations.
[5] page 227.

amount of depression as a rule for procedure. We should not hesitate to operate in *an adult* in which the depression was an eighth of an inch, even if symptoms of compression were *not* present. The remote consequences of depressed bone are too well known for dispute. Some surgeons of eminent skill would uphold us in operating in a case of *fissure* of the skull, or in case of a blow without fissure, should compression supervene. With children the rule would be different. In traumatic cerebritis calomel and opium are recommended. No allusion is made to Hammond's view—that the bromides, [1] and the oxide of zinc [2] lessen the amount of blood in the brain.

Injuries of the Spinal Cord and of the Vertebral Column are discussed with marked interest, and the article shows a thorough acquaintance with the subject; Reduction of displaced vertebræ is advocated when possible.

Pyæmia composes an interesting chapter. The author states that the "morbid condition results from the absorption of septic material." Phlebitis is seldom thought to be the cause. Gonorrhæal rheumatism and urethral fever are mild types (p, 429 and 899.

The subject of *Aneurism* is well handled. The author seems less positive in favor of ligature of the femoral in popliteal aneurism than he expresses himself in his edition of Erichsen, being governed by the nature of the case.

In a short chapter on *Orthopædic Surgery*, the treatment of club-foot is directed to the "mild," and "severe" cases. The latter usually require tenotomy; in regard to the former, while cures may be effected by apparatus, "tenotomy (which has not been proved to do any harm) certainly abbreviates the treatment," (p. 625.) Barwell opposes the operation in all cases. We prefer with Sayre to direct the treatment to cases of *paralysis*, and to those of *contraction* of the opposing tendon without paralysis. In the former class, tenotomy will surely make a useless limb, at least for an indefinite period, but in the latter the operation is required. The differentiation of the two classes can be made when the child is asleep or anæthetized.

The subject of *Urinary Calculus* is well considered, and the various operative procedures well described. We think the author is a little hasty in condemning lithotrity in children under the age of puberty, and unfair in his reference to Guersank's tables. His lithomies number 100 with 14 deaths, and lithrities 40 with 7 deaths, (17½ per cent.) The fact is, 6 of the former died of intercurrent affections, and there remained permanently, 1 rectal and 2 perineal fistulas, and 3 cases of incontinnence of urine. Of the latter operation 4 died of intercurrent affection, and one in consequence of a fault in the operation, and no bad result occurred in those who survived. Still, no doubt most surgeons will prefer lithotomy in young children.

There are many other points in the book to which we would have referred,

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1. N. Y. Med. Jour. for June 1855, p. 203
2. Diseases of the Nervous System, p 555.

but we have already exceeded our limits. The work, on the whole, is well arranged, concisely written,—indeed, no more truths could well be put into the same space; and the descriptions are, for the most part, clear. In the author's desire to limit the size of the work, some subjects seem to be rather too hastily passed over; but many of the articles receive due attention and are admirably presented. Among those of especial interest, not already discussed, are those embracing venerial diseases, diseases of the vascular system, excisions, herina, and diseases of the urinary organs. The rules laid down for operative procedures are, in the main, capital, involving late views and inventions; and the whole work gives evidence of having been written by one thoroughly familiar with surgical literature.

We notice but few clerical errors; "patience" is written for *patient*, (p. 757) "coccydynia" for *coccyodynia*, (p. 243.) "Symptoms" is sometimes written when *signs* or *clinical history* would better express the thought. "Attain" is repeatedly used in a wrong sense throughout the book, and a few additional errors and omissions are noticed in an appropriate list.

The wood cuts, many of them, are new and well made, and the book is presented by the publishers in good shape.

C. H. R.

A Clinical Manual of Diseases of the Ear. By Lawrence Turnbull, M. D., etc. Philadelphia, J. B. Lippincott, 1872.

This work is divided into twenty chapters and takes up in a regular and systematic order the anatomy of the ear and its functions. The Physiology of Hearing, Acoustics, Classification of Diseases of the Ear, Means of Diagnosis by use of Artificial and Daylight, Diseases and Injuries liable to occur to the Ear, and a Resume of the most effectual method of treating the more frequent affections of the ear.

We have not had sufficient time to give the book that careful attention which is so necessary in order to a complete review of the subject, but from what we have seen of it it impresses itself on us as a book destined to become one of the standard works of the day. The work is amply illustrated by over one hundred wood cuts and lithographs. On pages 416-419 is given a tabular view of the dissections of the ear in sixty-five deaf mutes, cases from Schwartze, Virchow and others which will be of interest to persons interested in the morbid anatomy of the part. The work concludes with a Bibliograph of the most important articles on the subject published from 1683 to 1871.

BUFFALO

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Original Communications.

ART. I.—*Medical Society of the County of Albany. Semi-Monthly Meeting, Feb. 21st,* 1872. *Reported by* JAMES S. BAILEY, M.D.

DR. JOSEPH LEWI, President, in the Chair.

After the reading and approval of the minutes of the last meeting, the names of the following gentlemen were proposed for membership, viz. :—

Drs. Caleb Lyon, Stephen A. Ingham, E. J. Fisk and R. H, Starkweather.

Dr. R. H. SABIN reported the following case:

February 19th, 1872 was called to see Mrs. F., aged 18 years. She was suffering great pain in the head and back, with high fever, tongue swolen and covered with a dark brown colored fir, thirst was great, and the inside of the lips was very sore and bleeding upon the slightest touch. She vomited every thing that was taken into the stomach. The conjunctiva was much congested, the skin hot and scarlet. She was seven months advanced in pregnancy, urine scanty and passed with difficulty. Upon the morning of the 20th had slept about two hours. Symptoms much the same as the day previous; water was not passed voluntarily so Dr. S. resorted to catheterization. The redness of the skin had somewhat subsided, there was no eruption. Stomach still rejected every thing taken Os uteri somewhat dilated and slight hemorrhage. The fœtal heart could not be heard. Dr. Quackenbush was called in the evening. Symptoms very much the same. She was gradually sinking, and died at 9 P.M. Shortly before death she had spasms when purpuric spots appeared upon various parts of the body. The matter vomited was nearly black.

Dr. Sabin also reported a case of *Uterine Hemorrhage.* Mrs. M. aged 48, usually menstruated regularly. Two years ago had had an attack of uterine hemorrhage. Her youngest child was 20 years old; three years after his birth she had a three months miscarriage. She bled profusely for several days. The per Sulph. Ferri was used per vagina successfully though she sank rapidly from nervous exhaustion, but finely made a good recovery though slow. The hemorrhage this time commenced with her menstrual flow. As she did not usually bear medicine well, he again used the Ferri per Vagina, but owing to the lack of fibrine in the blood it did not coagulate it. Upon the 9th Dr. Quackenbush counciled with him and thought the hemorrhage came from the uterine walls. Dr. Seymor counciled also. They then used Elixir Vitriol, Sugar of Lead and Ergot, but she received more relief by use of the per Sulph Ferri applied to pledgets of lint used as plugs to the vagina. She again sank with nervous prostration. Vomited much which seemed to threaten her life. Her heart beat very feebly, Dr. S. then resorted to Ferri and beef tea injections, with 20 grs. of the bromide of ammonium. Afterwards used the carb. of ammonia, with water and milk in the same way. She is now able to sit up. He is now using oxygen gas with marked improvement. She consumes four gallons per day, one-half in the morning and the rest in the afternoon.

Dr. Beckett objected to the treatment; said he would have plugged the vagina and then given Ergot, and if the stomach would not have tolerated opium, he would have used the hypodermic injections of morphia in this case. With this treatment the hemorrhage would have ceased in three days, instead of lasting three weeks. Remarks were made by other gentlemen, when the President announced that it was time for recess and refreshments; after which,

Dr. Estes H. Davis read a paper upon *Inflammatory Phthisis.* Dr. D. remarked that every disease to which the human system is liable, however little the suffering that may attend it, and although free from all danger to life, is still worthy of the attention and consideration of the medical practitioner.

Some diseases have interest from the rarity even of their occurrence, so that but few of any period have the opportunity to observe them ; while others, from their wide spread prevalence and frequent occurrence, constitute a large share of the cases upon which he is ordinarily called to attend. Others from their frequent or general fatality, and prevailing as extended, and devastating epidemics have, like Small Pox, and the plague of the past, and like Asiatic or epidemic cholera, and spinal meningites, or spotted fever of the present day forced themselves upon the highest attention and stimulated the most exalted energy. To stay and mitigate their terrible devastation, have put in requisition all the known resources of our art. Inflammatory Phthisis, or Phthisis Pulmonalis has not, like the tornado of a vast epidemic, swept from existence its thousands in a day ; but like a mighty avalanche, it has moved forward with resistless force, and in its onward and unstaid course from age to age it has crushed out the life and buried in the tomb its tens of thousands of our race ; and while the world has looked anxiously to the profession of medicine for help and succor from this terrible malady, they have for the most part been able to give in return only that which embraces within itself all other ills —the word hopeless. It appears from the statistics given by Drs. Curtis, Haywood and Emerson, that the mortality from consumption in the cities of Boston, New York and Philadelphia, for a period varying from twenty to thirty years was from about fourteen to over eighteen per cent. of all the deaths that occurred in them. In Wood's Practice of Medicine we find this language : "This disease is probably the greatest existing scourge of the human race, at least in the northern and middle latitudes. It will not be deviating far from the truth to state that it causes one sixth or one seventh of all the deaths north of the tropics." It will not excite surprise that in former times when prejudice prevented frequent examinations of the body after death, and the progress of knowledge with the present appliances of our art not then enabling the physician to detect the morbid changes that were progressing during life, or frequently note the nature of the changes that were left after death, that the essential character of this malady was not then well understood. But with all our advancement in medical knowledge and improvements in diagnosis, especially in diseases of the lungs, I think I may safely venture the opinion that we are still unsettled in the pathology of Phthisis, its causes, and many of the pathological changes that it involves. Since the researches and writings of Laennec and Louis it has generally been conceded that their teachings were correct, and that Phthisis essentially consisted of a depraved state of the blood, associated with a morbid condition of the lungs, by which was effused into them an unhealthy lymph constituting in the language of William's Pathology cacoplastic and aplastic plasma, and agreeing with the miliary gray gelatinous and crude or yellow tubercle of Louis and Laennec. The deposition of this plasma is unattended, according to these authors, by any inflammatory action in the lungs, either as a necessary cause or a consequence of their development, and in four-fifths of patients fever does not become associated with tuberculosis till a more or less advanced stage. Lebert, who takes this view of the pathology of Phthisis, says it is important to note that, as a rule, no cause for chronic pulmonary tuberculosis can be found, and the popular saying that a neglected catarrh leads to consumption, is false. These opinions would seem to have very generally prevailed with the profession ever since their advocacy by these celebrated authors. But there have been some medical men, and the number seems to be increasing, who, without denying the existence of some such cases of phthisis, still believe that they constitute but a small proportion of the whole number, and that in most cases inflammation is the very foundation of the disease, and the change of structure but the result of inflammatory processes. That all forms of pneumonia may produce it, but especially the chronic interstitial. If this theory be true, in so far must the other prove pernicious in practice, for, as Niemeyer asserts, in very many cases there is not a single tubercle in phthisical lungs. It would seem that the physical signs as elicited by auscultation and percussion are essentially the same in tuberculosis, caseous infiltration, abscess and red and gray hepatization of the lungs, and what is true of one is, in the main, common to all.

Mr. Skoda, in his work on auscultation and percussion, says, "The auscultatory and percussion signs of indurated lungs are the same as those of hepatization, and what has been said of their modification in hepatization holds good in cases of induration." I was called to make a *post mortem* examination of the lungs of Mrs. S. Two of her sisters had died within a short time with Phthisis. I had not seen her during her sickness, but was informed she exhibited the usual symptoms of that disease, which terminated her life within three months from the commencement of her illness.

I found the left lung studded with small abcesses, especially the upper half, varying in size from a small pea to that of a hickory nut, and a few still larger; some of them communicated with each other by small openings, and a few with bronchial tubes, others were separate and entire. The substance inclosing the pus, and lying between the collections, extending some distance from their walls was a consolidated mass, having none of the appearance of lung tissue. Some of the lower portions of the lung were infiltrated with pus. The right lung was in a similar condition, but not so far advanced in structural change.

I did not find a tubercle in either lung, but inflammatory action was plainly apparent in both. This case would seem to be one of acute inflammatory Phthisis or quick consumption, with no tuberculous deposits, but exhibiting the caseous infiltration of Niemeyer as a result of inflammatory action.

I was called to see Mr. A. a farmer, in company with his attending physician, in the last stage of phthisis, and received from himself the circumstances attending the origin of his sickness. While plowing, two years before, with a spirited pair of horses, the plow came violently in contact with some obstruction by which the handle was thrown backwards with great force, striking him a severe blow on the chest over the sternum. He felt that he was quite severely hurt, but still was able for a time to continue his labor on the farm. He continued however to feel pain and soreness in the region of the injury, which gradually extended through the chest, followed by cough, purulent expectoration, and an ultimate development of all the symptoms of a confirmed phthisis, which terminated fatally in about two years from the time of his receiving the injury. After his death, I was called by his brother, who was himself an intelligent physician, to make an examination of the lungs. I found a large portion of them completely disorganized, and not showing any appearance of lung structure. The disorganization consisted of numerous small abcesses from the size of a shot to that of a small filbert, lying in a mass of induration, of which some portions were firm, while others constituted a soft solid homeogenious mass of low organization. The cacoplastic plasma of Williams' and the caseous infiltration of Niemeyer exemplifying the language of Carpenter that, as the ultimate tendency of inflammation is to produce the disintegration of the part so the ultimate tendency of the fibrinous exudation is to keep its elements together.

As I did not find a tubercle in either lung, and as this case was clearly inflammatory *ab Initio*, I could but regard it as a marked and interesting exhibition of inflammatory phthisis. The microscopic observations of Gerber, Gulliver, Addison, Watt and others, are a remarkable confirmation of the opinion that tubercular matter, pus and coagulable lymph, are but varieties of the same albuminous matter that exists in the blood, and that these products, to which may be added the caseous infiltration of Niemeyer, are, but the result of inflammation, and the materials of which new membranes, textures and deposits are formed, and present every variety of plasticity from that of perfect cicatrices and false membranes down to that of yellow tuberculous matter. In short, that both induration and softening occur as the result of inflammation, and the circumstances which determine suppuration are, first, a certain intensity of the inflammation, and second, a peculiar condition of the blood, but, if the morbid action be of a lower kind the nutrition of the natural texture is only impaired, not arrested, and from the increased deposition of solid matter, induration or consolidation takes place. If we admit these conclusions to be true, in connection with the *post mortem* appearances of many cases of phthisical lungs, proving the absence of tuberculosis, and that these, with many cases having tuberculous deposits have their origin in some form of inflammatory action, then the evidence is forced upon us that non-inflammatory tubercular phthisis is the exception, while that form of phthisis resulting from pre-existing inflammation is by far the more prevalent and common.

These organic changes of the lungs in phthisis must be admitted are for the most part without the pale of successful medication, but, if always, or even generally, they are preceded by inflammatory action as a cause, then, so far as all forms of inflammation modified by any changes in the circulating fluid are ameniable to medicine, so far we may reasonably hope that our efforts will be rewarded with success by early, persistent and judicious treatment.

After a lengthy discussion upon Dr. Davis's paper by every member present the Society adjourned.

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ART. II.—*Case of Extra Uterine Fœtation*, By HARVEY JEWETT M. D., Canandaigua, N. Y.

A paper read before the State Medical Society at their meeting in February, 1872.

Extra Uterine Fœtation in many of its forms is of such rare occurrence, especially in private practice, that the following case of tubal pregnancy is deemed worthy of record.

Perhaps, if in all the instances of sudden death, a more scrutinizing investigation as to the cause, could be instituted, many cases that are now shrouded in mystery might reveal numerous instances of this abnormal condition.

Mrs. F., the wife of a farmer, of good constitution, had been married 16 years without offspring. During the months of May and June, 1856, she found herself unusually indisposed and applied to her family physician, who assured her that she was pregnant. On the 8th of August she consulted the late Dr. E. W. Cheny, to whom I am indebted for the leading facts in the history of her case, and by whose courtesy I was permitted to examine her in the last stage of her illness and make the examination after her death.

The patient stated that in jumping from a buggy to the ground a few days previously she was severely jarred inwardly, pointing to the right Illiac region; but was not entirely disabled from her domestic duties. She was seized next morning, while at the breakfast table with severe pains in the lower part of the bowels, followed by exhaustion and faintness.

Dr. C. was immediately called and found her in great pain in the uterine region, small, rapid pulse, sallow, exsanguineous countenance, and the whole expression of her face betrayed the most intense anxiety and suffering. The abdomen was considerably distended, which was supposed to be partly chargeable to retention of urine, and constipated bowels. Accordingly, a catheter was introduced into the bladder, and the bowels unloaded by a cathartic, with a slight dimunition of the fullness.

The pain, bloating and prostration continued, notwithstanding the most vigorous use of anodynes and stimulants, until the third day when she sunk down from exhaustion and died.

The *post mortem* 24 hours after death, revealed the mystery hanging over the cause of death. The peritoneal sac was distended with bloody serum, and a large coagula was found in the pelvic cavity. On removing the fluid a fœtus, apparently between three and four months, was found in the Illiac region, having escaped from a rupture in the right fallopian tube near its center, the placental mass was partially attached and remaining in the sac which contained the fœtus.

Cases of Extra Uterine pregnancy are somewhat rare in the human species, and are said never to have occurred in the lower order of animals.

Ramsbotham, and many other writers, divide these abnormal cases in four species, viz. : the ovarian, tubal, abdominal and parietal.

Cazeaux has subdivided these into ten varieties, which have received different names according to the part of the passage where the ovule is arrested and develops.

There is a general concurrence however on the part of all writers, that the tubal is by far the most common of all the forms of extra uterine fœtation. And the reasons are obvious why this should be so, if we but look for a moment at the length and narrowness of the canal through which the fecundated ovule makes its transit from the ovarian bodies to the uterine cavity.

This arrest and developement may take place at any point along this canal wherever it meets with any obstruction, and where it forms adhesions to the inner surface of the tube itself.

Under such circumstances the fibers of the fallopian tube become the enveloping structure of the embryo fœtus, which, by its continued growth distends enormously this structure until it culminates in a rupture of its walls, ordinarily between the third and fourth months.

Instances occur in which the impregnated ovule is not detached from its bed, and the ovarian structure is converted into a sac for the newly organized being.

In this case, which is denominated ovarian pregnancy, the structures are better adapted to development and distention, and the work may go on even to the full period of gestation, and the patient unconscious of her true condition and her eminent peril.

The structures of the walls of the cyst therefore differ according to the place where the fecundated ovule finds a lodgement.

In the tubal variety they consist of the walls of the tube itself and in the ovarian of the integuments of the ovary and its peritoneal envelope.

When such unfortunate conceptions take place, the patient will regard herself pregnant since all the rational signs of pregnancy are present such as cessation of the menses, sickness of the stomach, enlargement of the breasts, and a deeper tinted areola.

Neither can we determine, by the most critical examination, the exact condition and impending danger that threatens the life of our patient. We may determine by exploration that the uterus is unimpregnated, but our diagnosis must be negative, aud conjectural in character. If we find all the rational signs prominently marked and the uterus unimpregnated, we may, with great confidence, *infer* that one of the several forms of extra uterine fœtation above alluded to may exist.

If the patient complains of pain or discomfort during any one of the forms of extra uterine pregnancy, we are not likely to attribute her indisposition to the true cause. We are assured by the best authority that there are no diagnostic indications that characterize unmistakably the peril that awaits the unfortunate victim.

The first indications of danger will often be an instantaneous rupture of the sac, followed by intense pain, exhausting hœmorrhage, palid face, rapid pulse, and all the indications of speedy dissolution.

We are told that under such circumstances we are left to the painful alternative of soothing the suffering, the cause of which is entirely beyond our control.

Numerous instances are on record in our text books on obstetrical practice, in which the subject goes on to the full period of gestation, and even many months and years beyond that period, and the cyst remains intact. Then again, natural labor-pains come on at or about the completion of the ninth month, in some instances resulting in a rupture of the sac with all its disasterous consequences.

Many instances are recorded where the fœtus dies and remains incased in its covering, an innocuous mass within the cavity of the abdomen—the vitality of the cyst in such cases is preserved and the contents remain undisturbed without compromising the life of the mother.

Generally, we are told, however, that the development of the cyst ceases with the life of the fœtus—the circulation becomes more feeble, the parts atrophied and remain in that condition until adhesive inflammation is set up and cements the walls of the cyst and the adjacent parts, ulceration follows and a communication is established with the rectum, colon, or any other organ with which it happens to approximate at the time, and the diseased mass is thrown off through these channels.

An instance of this kind (a patient of the late Dr. Edson Carr,) came under my observation a few years since, in which the bones and putrifying debris of an infant, at the full period, were removed with great difficulty from the rectum.

The mother in this case recovered after a long period of suffering from the pyemia and consequent exhaustion, resulting from the presence and removal of the diseased mass.

In view of the conservative efforts of nature, in rare instances, to cast off this foreign body, we may very naturally and profitably inquire can there be any surgical interference that will afford a reasonable chance of deliverance from the impending results.

There was a time when Ovariotomy was deemed so hazardous that patients were allowed to sink down and die rather than submit to the chances of an operation. But now recovery is the rule, after the removal of ovarian tumors, and success follows the use of the knife in hundreds of instances all over the land.

If the diagnosis can be satisfactorily established in a case of extra Uterine fœtation, I hold we are warranted in giving the patient the benefit of a chance attending an operation for its removal.

A case of this kind I find recorded in the British Medical Journal, in which Prof. McCulloch, of Montreal, removed a child from the abdomen by the Cæsarean section and the mother recovered.

The above well authenticated case sets forth the fact, notwithstanding the protestations of surgical interference by the authors of our American and Continental text books on this subject; and I hold that Gastrotomy is not only justifiable, but it is the bounden duty of the surgeon, when the diagnosis is clear, either in the rupture of a fœtal cyst, or in pelvic hæmatocele to operate at once, remove the accumulated blood, and tie the bleeding vessels.

Dr. Stephen Rogers, of New York, has written an elaborate memoir upon this subject, in which he claims that in all cases of extra uterine pregnancy there is an intra uterine decidua cast off, attended with slight hemorrhage, at some period varying from six weeks to several months, and is often mistaken by the patient for a return of the menstrual period.

This extrusion or expulsion of the decidua is regarded by Dr. Rogers, taken in connection with the other signs spoken of, as a pathognomonic indication of this abnormal condition.

The only pathological condition liable to be mistaken for a rupture of a fœtal cyst is pelvic hæmatocele, which, in some of its leading characteristics bears some analogy to the former disease. But a careful scrutiny into the history and antecedents of the case, will reveal the differential diagnosis so decidedly as to settle the question in the mind of any acute observer.

I would refer those who wish to make a more critical analysis of the subject to a statement published by Dr. Rogers, of New York, in the Medical Record for April, 1868, in which he has set forth in a tabular form, the differential indications that mark these anomalous conditions.

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ART. III.—*Ligature of External Iliac.* By S. A. FREEMAN, A. A. Surgeon U. S. A.

Private William Hedman, German, of Co. A. 12th U. S. Infantry, was admitted to Post Hospital, at Camp Wright, Mendocino County, California, on the morning of November 21st, 1871, suffering from what I at once diagnosed to be Aneurism of the Femoral Artery, at the terminus of the external Iliac. Had been on fatigue duty three days before, and while assisting in lifting curb from well undergoing process of repair, felt that he had hurt himself in the groin.

I perceived, on my first examination, a tumor about the size of a large marble right over the femoral artery, on the line of Poupart's ligament, which emitted to the touch a distinct, firm, unyielding pulsation. I immediately resorted to the usual methods to effect a cure, but all efforts seemed futile. The tumor having formed so high up I was unable to bring the necessary pressure above it to lessen in the least the circulation through it. It increased rapidly in size, and by its pressure upon the surrounding parts, occasioned considerable pain and numbness of the limb. December 10th, tumor was about the size of a hen's egg, and, as I said before, rapidly enlarging. I decided to operate, and on the morning of the 17th of December, the "constitutional state of the patient being good," the bowels thoroughly relieved of 'all fæcal matter, I had the patient placed under the influence of chloroform by Hospital Steward John Dillon, U. S. Army, and cut down to, and ligated the external Iliac artery. There was no hemorrhage; pulsation in the tumor stopped at once, closed wound with stiches and adhesive plaster, and gave ½ gr. of sulph. morphia as soon as patient had passed from chloroform. Patient did not rally very well from operation and chloroform. Circumscribed Peritonitis set in, swelling and tympany of whole abdomen. It yielded, however, readily to treatment, as follows: Hot aqueous solutions of opium to abdomen and wound; internally ¼ gr. of morphia every two hours.

December 22d, patient doing well; tympany and peritonitis subsided; passed urine through catheter up to this time; removed adhesive plaster this day and dressed wound with carbolic acid and sweet oil. Injected solution of chlor. sodæ to wound which emitted bad odor and sloughed considerably.

December 30th, patient is in fair way for recovery. Sloughing has ceased; ligature did not come away till January 9th, 1872—twenty three days from date of operation. No hemorrhage or bad symptoms followed. At this date, January 22d, wound has nearly healed; patient's general health is good; is able to sit up in bed and move about the ward on crutches.

CAMP WRIGHT, CAL., Jan. 22, 1872.

ART. IV.—*Ex-opthalmic Goitre, or Grave's Disease.* Reported by J. W. SOUTHWORTH, Toledo, O.

Mrs. J. H., aged 35. Nervous temprement. Habits of life temperate; has worked hard late years making beaver overcoats. Has one child, a girl of 5 summers. Had occasional "rush of blood to head" in 1867, with vertigo; cold water relieved it. Had slight tremor of lips and palpitations of heart when over worked or excited. After a hard week's work felt a sense of general weakness and increased trembling of voluntary muscles. Palpitation of heart soon became more or less persistent. In latter part of 1867, first noticed enlargement of thyroid gland; protrusion of eyes soon followed, and slight impairment of vision, with a wild staring look. These symptoms were more or less troublesome until 1868, when œdema of lower extremities appeared, but was not inconvenient unless she worked long, standing up; in the morning it was absent. (Had œdema with first child, 5 years ago, recovered soon.) In the autumn of 1868 was attacked with diarrhœa, and has not been free from it since; sometimes having six or eight passages in twenty-four hours, and was often obliged to get up two or three times during the night. Excessive lachrymation, loss of appetite, irritability of stomach and bladder, with headache and fever soon followed, the latter being worse at night. Tenderness, with radiating neuralgic pains in intercostal spaces in front was also present; and profuse bronchorrhœa, (muco-purulent, and sometimes streaked with blood,) attended with emaciation and inability to sit up long in bed.

On January 1st, 1869; when she first came under the care of Dr. N. H. Kimball, Adrian, Mich.,(with whom the writer was then associated,) we found inordinate action of heart, each beat notably jarring the patient's *entire body;* pulse 140 to 150, soft and quick. Area of apex beat larger than natural, very forcible, and felt out side of linea mammalis. A marked thrill felt over both carotids high up in the neck; a notable leaping up of the vessels at each pulsation,accompanied turgescence and pulsation of external jugular and superficial veins.

Superficial cardiac dullness extending to left nipple, the latter overlying the fourth rib, as in the male, from atrophy of mammary glands.

A loud blowing systolic murmur, heard loudest at base of heart, transmitted up the carotids as loud, if not louder; heard also at apex, but not conveyed to the left, nor heard at lower angle of scapula, or in the inter-scapular space.

Respiratory murmur very distinct in all parts of chest, and accompanied by coarse mucous rales on both sides. (Other symptoms as previously stated as existing in 1868.)

The enlargement of thyroid gland was soft and easily diminished by pressure, and equalled an ordinary lemon in size. Sputa offensive in odor; evacuations of bowels occasionally bloody. Diagnosis Ex-opthalmic Goitre, or Grave's Disease. Prognosis not very flattering either to the friends or physicians.

She was placed under the influence of Veratrum V. and Foxglove to control the circulation. Quinine and strychnia, with comp. spts. of lavender to strengthen the shattered nerves. Also a laxative and tonic powder of podophyllin, nit. of potassa and carb. of iron was given. The powder, however, was omitted on second or third day on account of salivation, induced, we suppose, by the podophyllin, as there was *no calomel given.* Animal broths, eggs, etc., for diet Mustard sinapisms were applied to chest and the tenderness and pains got better. At the solicitation of her husband teaspoonful doses of rye whiskey and rock candy were allowed three or four times a day, with apparent benefit.

However, from the above combined treatment she rapidly improved, so that in six weeks she was able to walk, all the symptoms having notably subsided, the cough and bronchorrhœa disappearing together The appetite restored, irritability of stomach, &c., gone also.

In two months she began to work some around the house, and in the course of three or four months she was quite fleshy and of good color. The heart's action was then, (without medicine) 100 to 110 per minute; respiration, 23; cardiac murmus faint. No cough or expectoration; turgescence and pulsation of veins absent; thyroid gland diminished to size of a walnut. Has occasional, but slight, muscular tremors, and only after undue exertion or excitement. Œdema of lower extremeties almost gone.

The treatment was not materially changed throughout. The veratrum was omitted the second or third week. Bismuth and

Dover's Powder combined with rhei. and soda was given to control the diarrhœa. Oxide of zinc was added to the foxglove and spts. of lavendar mixture after the veratrum was omitted. We gave the foxglove as a *cardiac sedative*, believing we should *realize* its so called tonic action on the heart *indirectly*, *i. e.* stopping the heart from exhausting itself by such rapid and forcible action. The patient is still in good health, and in spite of our protestations, resumed her avocation as soon as she could run a sewing machine. The urine was tested for albumen but none was found.

Present condition: "My health has been very good the past year; have a little numbness of fingers, and dizziness occasionally; some headache; no diarrhœa nor cough. The bunch in my neck enlarges a little when I don't feel well as usual. My feet bloat some." Her pulse is 95, and respiration 20 per minute. Has not taken medicine in almost two years.

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ART. V.—*On the Recent Advances in the Theory of Vision.* By H. HELMHOLTZ, *(of the Royal Society of London.)*

Translated from *Les Annales d'Oculistique*, BY F. W. ABBOTT, M. D.

(*Continued.*)

In the first part of our exposition we followed the progress of the luminous rays as far as the retina, and we saw how the peculiar arrangement of the optical apparatus causes the light which proceeds from every separate luminous point to unite upon a separate point of this membrane, so that each point of the external world irritates only one single terminal nervous apparatus. Ancient physiology did not think it necessary to look further. The external light touching the sensitive nervous substance, they considered that it was immediately perceived.

During the last century, and especially during the first quarter of this, the knowledge of the phenomena of the nervous system made such progress that, in 1826, Jean Muller, then of Bonn, and afterwards of Berlin, was able to write his work on the Comparative Physiology of the Sense of Sight, a work which made an epoch in science, and in which he established principles upon which rests essentially the study of the sensations. Not only have these principles been confirmed as to essential points by later researches, but their import has been found to be greater than the celebrated Berlin philosopher could have supposed from the facts which were known at that time. The propositions of Muller are everywhere cited under the title of *laws of the specific energies of the senses.* These propositions are therefore neither so new nor so little known that it is necessary to speak of them in connection with the recent advances of the theory of vision, and so much the more as they have often been referred to, as well by others as by myself. Nevertheless, as the whole of that part of the theory of vision which now occupies our attention is little else than a development and a consequence of the theory of the specific energies of the senses, I will ask permission to repeat here several things already known, so as to be able to establish a connection between that which I have to say that is new, and that which the reader already knows.

All our perceptions of the external world rest upon the fact, that certain modifications, produced in our organs of sense by the impressions which external objects cause in them, are conducted to the brain by the nerves; it is then only that we are conscious of them, and that they combine so as to furnish representations of objects. If we cut the conducting nerve so as to intercept the road by which the impression reaches the brain, sensation and perception instantly cease. With reference to the eye, the proof that perception does not reside immediately in the two retinas, but that it is formed in the brain, and by means of the impressions which the retinas send to this organ, is furnished by the fact that the representation of relief is only obtained—we will demonstrate this later—by the aid of the combination and the fusion of the images received by both eyes.

Thus, what we immediately perceive is never the influence of the external agent upon the extremities of our nerves, but always a modification transmitted by them, and it is to this modification that we give the name of excitation or irritation.

Now, according to all the facts yet known, all the nervous fibres appear to have the same structure, and the modification to which we give the name of irritation behaves in the very same manner in all, in spite of the great variety of functions fulfilled by the nerves. In truth, it is not their sole function to convey to the brain the sensations of the external organs; others conduct the volitions of the brain to the muscles whose contraction then moves the limbs;

others make the action of the brain felt upon certain glands whose secretions they excite, or upon the heart and vessels to regulate the circulation of the blood, etc. The fibres of these nerves, however, are all similar cylindrical threads of a microscopic fineness, transparent as glass, all containing the same contents analogous partly to oil and partly to the white of an egg. If these threads show differences in their diameters, this appears to be connected with circumstances of only secondary importance, such as the question of solidity, or the necessity of the existence of a sufficient number of independent conduits, without the thickness being essentially in proportion to the variety of the functions. All these fibres have the same electro motor properties as certain researches, especially those made by du Bois Raymond, have demonstrated; in all the condition of irritation may be obtained by the same mechanical, electrical, chemical, or calorific changes, and it is propagated in each sense with the same rapidity, (about one hundred and ten feet a second) and then produces the same changes in their electro-motor properties. Finally, all the fibres die in consequence of the same conditions, and the coagulation of their contents appears to vary only a little by reason of their thickness. In a word, barring the action of the other organs of the body with which they are connected, and where the effect of their irritation is manifested during life, all that is true for one nerve is absolutely applicable to all the others. Still farther, very recently two French physiologists, Messrs. Philippeau and Vulpian, after having cut the sensitive and motor nerves of the tongue, have succeeded in making the upper part of the sensitive nerve grow to the lower end of the motor nerve. The irritation of the upper part, which in normal conditions produces a sensation, was then carried to the motor nerve and to the muscular fibres which it animates, and manifested itself under the form of a motor irritation.

Hence we draw this conclusion, that the diversity of the effects produced by the irritation of the different trunks depends solely on the diversity of the corresponding organs to which the nerve reports its state of irritation.

The nerve fibres have often been compared to the wires of a telegraphic system, and, in truth, this comparison is extremely well chosen to set forth a remarkable and important peculiarity of these fibres. In the different parts of a telegraphic circuit the same copper and iron wires conduct the same kind of motion, the electric current, nevertheless we see the most varied effects produced at the different stations, according to the apparatus with which the wires connect. Sometimes it is a clock that strikes, sometimes it is a dial-plate, a printing, or an electro-chemical telegraph which is put in operation. The shocks which the electric current gives to our members may equally serve as telegraphic signals, and at the time of the laying of the Atlantic cable, Mr. W. Thompson found that the feeblest signals could be recognized by the sensation of taste which was produced by placing the wires upon the tongue. In other cases we employ telegraphic wires to explode mines by the use of strong electric currents. In a word, a telegraphic wire terminating in any point whatever may occasion every one of the effects so innumerably varied which electric currents are capable of producing, and, in spite of the diversity of the effects, it is always the same thing which passes along the wire.

That which precedes is well calculated to show that *when the conditions change, the same causes may produce different effects.* However commonplace this proposition may appear, it is only very slowly, and after great efforts, that we have come to formulate it, and reject the adage according to which the same causes are reputed to produce the same effects. We can scarcely pretend that the application of this proposition is even yet perfectly familiar to us; particularly in the subject with which we are concerned, has the resistance to admitting the consequences of this proposition endured to very recent times.

While the irritation of nerves which terminate in muscles or glands produces motions or secretions, that of the sensitive nerves produces sensations. But we have very different kinds of sensations. First of all, the sensations relating to objects of the external world divide themselves into five completely independent groups. These groups correspond to the five senses, whose difference is so great that it is impossible to make a qualitative comparison between a sensation of light and another sensation, either auditory or olfactory. We call this difference "difference of *modality*," and it is much more profound than that which separates comparable qualities; the expression "qualitative differences" will serve, on the contrary, to designate the differences between sensations pertaining to the same sense, such as, for example, the difference between the sensations of different colors.

If the irritation of a nervous trunk produces a muscular motion, a secretion, or a sensation, this depends solely upon the muscular, glandular, or sensitive nature of the organ where the nerve which is under consideration ends. The effect depends not at all upon the nature of the irritant employed, whether it is an electric shock, torsion, section, irritation by contact with a solution of sea-salt, or cauterization with a red hot iron. We know likewise,—and we owe this immense progress in our knowledge to Jean Muller,—that when we irritate a sensitive nerve the luminous, tactile, olfactory, or gustatory modality does not depend at all upon the kind of irritation, but solely upon the sense to which the irritated nerve appertains.

Let us apply this theory to the optic nerve. In the first place we know that no kind of action upon any part of the body, except the eye and its optic nerve, can ever produce a sensation of light. We take the liberty of doubting the histories of somnambulists, which are alone in contradicting this assertion. On the other hand, external light has not the exclusive privilege of producing a luminous sensation in the eye. Everything which can irritate a nerve may produce this sensation. The feeblest electric currents conducted through the eye produces flashes of light. A blow, or even a slight pressure exerted by the nail upon the lateral part of the eye produces, in the most complete darkness, luminous sensations which, in favorable conditions, may attain very great intensity. It is necessary to remark, that in this experiment no objective light is developed in the retina, as certain physiologists suppose. For the different luminous sensations may be sufficiently intense, for the illumination of the retina, necessary for the production of this sensation, to be easily perceptible to a second observer looking into the eye of the first, if the sensation is truly the consequence of a production of light in the retina. Now no such thing is seen. A pressure or an electric current irritates the optic nerve and, conformably to the law of Muller, there results a luminous sensation; but, at least under the conditions of experiment, they are incapable of producing the least trace of objective light.

So also, a congestion, or an alteration in the composition of the blood, which may be produced by certain febrile states, or the injestion of intoxicating or narcotic substances may produce, in the visual nervous apparatus, luminous sensations to which no external light corresponds. Finally, in cases of complete absence of the eye, in consequence of a wound or an operation, the compression exerted by the cicatrix upon the nervous trunk may still produce fantastic luminous sensations.

From what precedes it follows principally, that the peculiar modality by which the luminous sensation is distinguished from all others does not reside in qualities peculiar to the external light, to which this sensation can respond, but that, far from this, every thing which can irritate the optic nerve induces a sensation so like that produced by external light, that those ignorant of the law of this phenomenon easily believe in the presence of a veritable objective light.

External light, therefore, produces upon the optic nerve nothing besides that which may be produced by agents of any other nature. In one single respect is light favored in comparison with the other means of irritation: the optic nerve, situated behind the eyeball at the bottom of the bony cavity of the orbit, is almost entirely shut away from the influence of every other means of irritation, which only exceptionally touch it, while the rays of light may always reach it without obstacle, by traversing the transparent media of the eye. On the other hand, owing to the rods and cones, these terminal organs of its fibres, the optic nerve is infinitely more sensitive to the rays of light than are any other of the nervous apparatuses of the body, which perceives rays of light only when these rays are sufficiently concentrated to produce a sensible increase of temperature.

This circumstance explains how the irritation of the ocular nervous apparatus has become for us the ordinary sensual sign which discloses the presence of light in the field of vision, and how we do not distinguish between light and the luminous sensation even when the latter alone exists. But in considering the facts as a whole, we discover, beyond a doubt, that ths external light is only *one* of the irritations which may act upon the optic nerve, and that there exists no exclusive relation between light and the luminous sensation.

After having spoken of the general influence of irritations upon the nerves of sensation, we pass to the study of the qualitative differences of the luminous sensations, that is to say, to the differences in the sensations produced by the different colors, and let us apply ourselves particularly to finding out in what measure the differences of these sensations correspondent to real or objective differences.

To be Continued.

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Miscellaneous.

Cerebro-Spinal Meningitis.

SIR:—The rumor that epidemic cerebro-spinal meningitis has appeared in some portions of this State, and the announcement that some cases have been reported to the Board of Health, induces me to write a few lines, with the hope of calling the attention of medical practitioners, who may have the opportunity of seeing this disease, to some details of treatment, and especially to the use of the ordeal bean of calabar, which I believe has been of service to me in the management of a recent limited epidemic.

Since the beginning of November last I have treated forty cases of cerebro-spinal meningitis. Twenty-nine were well-marked typical cases. The ages of my patients ranged from 3 to 16 years. Four died, and one is not yet out of danger. As this epidemic occurred under peculiar circumstances, and presented many features which may be of interest to the profession, I propose to publish soon a full report.

The therapeutics of this disease are notoriously unsatisfactory. The mortality of reported epidemics ranges from 30 to 75 per cent. The death-rate of my cases is only 10 per cent. But their number is too small to allow any legitimate conclusion to be drawn from such limited statistics as to the value of any particular treatment. I anticipate my report, therefore by this preliminary statement, that others may not miss an opportunity of testing the value of the remedies I have employed.

Waiving for the present all discussion concerning nosology, etiology, pathology, and morbid anatomy of cerebro-spinal neningitis, I may be permitted to state that the most salient and central feature of this disease seemed to me to be an enormously increased reflex irritability of the nervous system, with an attendant paralysis of some branches of the sympatheticus. In studying my first case it occurred to me that calabar bean, which ophthalmologists use in eye-diseases dependent upon an irregular or interrupted innervation of the dioptric apparatus, and which lately has acquired considerable reputation in the treatment of various forms of tetanus, might be of use in this disease, the symptomatology of which is so largely made up by paretic and tetanoid phenomena.

At first I used the tincture of calabar bean, but afterwards I succeeded in procuring the extract. The extract was manufactured by Hazard & Caswell, 2½ drachms of which are equal to 2 ounces of the bean. I had one drachm rubbed up in glycerine and gave 2–5 drops at a dose.

I administered this drug in every case, as soon as tetanic contractions or apparent paralysis of the sphincter iridis appeared; except in two fatal cases, one of which terminated very rapidly, the other occurred before I had obtained the extract and after the tincture was exhausted.

In the great majority of cases the drug seemed to exert a favorable influence upon the symptoms which it was intended to control. In a few of the milder cases, where there was rather a contracted pupil, I administered atropia in pretty full doses, without, however, influencing the general course of the disease.

In the onset of the attack the symptoms are generally so violent, cephalalgia and rachialgia so severe and distressing, the skin and mucous membranes so congested, that depletion seems the one thing indicated, and yet I have resisted every temptation to abstract blood. I have neither bled, nor leeched, nor cupped, nor blistered. Ice in bladders to head and neck mitigated the pain and proved grateful to the patient.

Cathartics I used very moderately, not intending to produce any revulsive effect upon the bowels.

I had no reason to be dissatisfied, with this treatment, when afterward, in some of the protracted cases, a prostration set in as extreme as the precedent violence, and a degree of emaciation followed which rivalled the marasmus of the everlasting gastro-intestinal catarrh of starveling foundlings.

In the first days, or whenever, in the course of the disease, there was great restlessness, or violent jactation, I administered moderate doses of chloral hydrate, 10–15 grains, repeated as required. Morphine I gave only in one case where ice seemed unpleasant and headache was worse.

Although there is a certain rhythm and periodicity in the progress of this disease, I have seen no reason for giving quinine until after convalescence was established, and then, in combination with iron, it doubtless proves beneficial in re establishing the vigor of the system.

In most of the cases periods of coma follow or alternate with spasms and jactations. In such cases I have found the iodide of potassium of service. But this drug must be administered with a bold and liberal hand. I have given from 2 scruples to a drachm in 24 hours; generally alternating it with the extract of calabar bean, so that my patients received every two hours either a dose of calabar (2–5 drops) or a dose of pot. iod. gr. 6–10.

Cerebro-spinal meningitis is not a self-limited disease; it is protean in its manifestations; probably more frightful in its phenomena than severe in its anatomical lesions,—at least in a majority of cases,—and offers, therefore, a hopeful field to the therapeutists, although few victories have as yet been won. To induce physicians to make new trials I have ventured to state briefly the method of treatment I have pursued; so far as its results go, I believe they are more favorable than any that have been obtained.

In general hygiene little could be done in the persent state of our knowledge as the cause of the disease. I have used carbolic acid as a disinfectant, and internally to some extent.

In concluding these lines I wish to express my gratitude to Professor Jacobi, who had the extreme kindness to visit my patients with me, and to whose profound knowledge of the diseases of childhood and skillful application of modern therapeutics I am indebted for much valuable advice. Very truly yours,

C. F. Rodenstein, M. D.

Westchester, March, 1872. -*The Medical Record.*

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The Use of Carbolized Catgut Ligatures

Dr. George Buchanan reports in *The Practitioner* for July, 1871, a case of diffused traumatic aneurism upon which he had operated by laying open the sac and applying a ligature both above and and below the wound in the artery. Carbolized catgut ligatures were used, because it was thought they would produce obliteration of the artery without ulceration through its coats. Considerable discharge took place, but from first to last not a trace of decomposition or putrification could be observed. The most careful examination of the discharge failed to detect any appearance of the catgut ligatures, and they were probably retained and and imbedded in the tissues, occlusion of the vessels taking place without ulceration of the coats of the artery and discharge of the ligature. The patient made an excellent recovery.—*Philadelphia Medical Times.*

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Iodized Milk

From Hoffman's most admirable report on the "Progress of Pharmacy," we make the subjoined extract which has a practical value for the physician: It is well known that milk takes up iodine, disguising its taste, smell and color, completely: since iodine is an antiseptic, iodized milk keeps for some time. Dr. Hagar calls attention to this fact, and suggests that this, perhaps, is the mildest form of administering iodine. Its therapeutic effect seems to be equal only to about one-fifth of the iodine. Hagar thinks iodized milk will soon become a favorite form of administering iodine, and suggests the following mode of preparation: One part of iodine dissolved in ten parts of alcohol, admixed with ninety parts of fresh, warm cow's milk.—*Medical and Surgical Reporter*

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Tobacco.

In the November part of the *Royal London Ophthalmic Hospital Reports*, Mr. Jonathan Hutchison gives an account of his further experience in respect to amaurosis supposed to be due to tobacco. It will be remembered that he has previously written on the subject, his first paper appearing in the *London Hospital Reports* for 1864; his second in the *Medico-Chirurgical Transactions* for 1867. He tells us that "idiopathic amaurosis" appears in great disproportion between the two sexes. In his first series the numbers were thirty-seven men and three women; in the second thirty-four men and five women; in this third series we find twenty-eight men and only one woman. We should be very glad to learn from any of our foreign correspondents in countries where both sexes smoke, whether the same disproportion of cases of amaurosis is observed in men and women. Mr. Hutchinson has carefully investigated other possible causes, and still believes that tobacco is the real one. He notices thot most of the sufferers smoked shag, and pronounces that "the most deleterious form of tobacco." But we take leave to remind him that most of his cases are hospital ones—the patients therefore poor—and shag is the *cheapest* form of tobacco. Morover, it is perhaps the most commonly used form, even among those who can afford a more expensive quality. Mr. Hutchison has found in the early stages that the vision improves when the disuse of tobacco is real and complete, and therefore considers it a duty to urge complete, immediate abstinence.—*Cincinnati Lancet and Observer.*

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Disinfectant Treatment of Small-Pox.

Dr. Stevens writes to the *British Medical Journal:*

Having lately had charge of two small-pox hospitals in Plymouth, I have adopted the disinfectant treatment of Dr. Sansom, of London, viz., the administration internally of bi-sulphate of soda every four hours, and the application of olive-oil and carbolic acid to the pustules externally. By these means he contends, that "the patients are themselves disinfected, and rendered inocuous to the community at large." I must say that this plan has been attended by more favorable results than any other with which I had previously been acquainted, and can most strongly recommend it to my professional brethren. I have, however, to make certain that no infection should be conveyed to the public after leaving the hospital, caused each patient to be put for a quarter of an hour on three successive days into a bath containing a pint of chloralum. This has been done immediately convalescence has been established, and the patients have been discharged from the institution forthwith. By this proceeding much expense has been saved, and the beds made available for other sufferers in quick rotation. I have also employed chloralum in solution as an external remedy before the application of olive-oil and carbolic-acid. This has been the means of cooling the inflamed surface and of allaying the itching. *Medical and Surgical Reporter.*

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New Method for Extraction of Cataract.

The *British Medical Journal* for December 2d contains a clinical lecture by Dr. R. Leibreich, on his new method for cataract extraction. He thus describes it: "The incision of the cornea is to be made with the smallest possible Græfe's knife thus: Puncture and contra-puncture are made in the sclerotic, about one millimetre beyond the cornea, the whole remaining incision• passing, with a very slight curve, so that the center of it is about one and a half millimetres distant from the margin of the cornea. This incision can be made upward or downward, with or without iridectomy, and the lens can be removed through it, with or without the capsule." The instruments required are only Græfe's knife, one cystotome, with Daniels' spoon. In three hundred operations the Doctor's per centage of suppuration was not greater than Græfe's method, while the optical results were identical with the best results of flap-extraction.—*Detroit Review of Medicine.*

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The Treatment of Small-Pox.

Dr. Alexander Collie, the resident medical officer at the Homerton Fever Hospital, says that treatment in the mild variety of variola is unnecessary, and in the black small-pox useless. In the confluent form, however, treatment is of the greatest importance, and the result of the case will sometimes be determined by it. The room in which the patient is placed should be thoroughly ventilated, the windows being kept open even in winter. If possible there should be two beds in the room, in order that he may be changed from one to the other. He should be allowed a highly nutritious diet, consisting of milk, beef-tea, eggs beaten up with whiskey, tapioca. Cold water will be found most efficacious in relieving thirst, and the prejudice of the patient's friends should not be allowed to interfere with its administration. Effervescing drinks and lemonade may also be allowed. For heat of skin the patient may be sponged with cold water two or three times daily. If there be much restlessness or sleeplessness, the following, repeated in half an hour if needed, will be found of great service: Tincture of opium, 15 minims; spirit of ether, 15 minims; camphor water, 1 ounce; and if this fails stimulants may be given. For the soreness of throat, oleaginous of mucilaginous drinks may be given, and the following has also been found beneficial: Tincture of iron and glycerine, of each 39 minims three times a day. If laryngitis occur, a large linseed poultice should be applied round the throat, and the temperature of the room should be raised, and rendered moist by means of steam. All depressing remedies should be avoided, and tracheotomy should be performed whenever there is much interference with the respiration. If the patient becomes delirious, it is of the utmost importance that he should be treated with patience, gentleness, and firmness, and that no measures of restraint should be employed. Nothing has been found absolutely preventative of pitting. Common olive-oil may be used for this purpose in preference to applications which are more or less irritating. If diarrhœa occur, a mixture containing laudnum and sulphuric acid may be given.

In regard to the time when a small-pox patient may be considered free of danger to his neighbors, Dr. Collie says that this cannot be until all the products of disease are removed from his body, and until he presents all the ordinary indications of health, such as a normal temperature, a quiet pulse, a clean tongue, a clear mind, etc.—*Philadelphia Medical Times—New Remedies.*

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A Plan for Facilitating the Reduction of Strangulated Hernia by Taxis.

Dr. P. C. Smyly, in the *British Medical Journal* for December 25, 1871, reports a plan by which he has successfully reduced strangulated hernia when all other plans had failed. "In inguinal hernia in the male the index finger is applied to the lowest part of the scrotum. This is invaginated, the finger being passed behind the testicle and cord up to the external ring. The hernial tumor is then pressed downwards over the finger, toward the back of the hand, so as to make the strictures in the ring tense, and consequently smaller. The invaginated finger is then forced firmly upwards and outwards in the direction of the internal ring. As soon as the finger is firmly grasped the hand should be slightly turned, and the finger pushed toward the middle line. Considerable force may be safely applied in this way, as all the delicate structures are behind the finger, which acts mainly on the stricture. On withdrawing the finger the hernia can usually be easily returned. The same principle is equally applicable to femoral hernia." The advantages claimed for this plan are: 1st. The strangulating portion of the ring is dilated before any pressure is applied to the bowel. 2d. Much greater force may be applied to dilate than could safely be brought to bear when the intestine is employed for dilatation, as in ordinary taxis. 3d. There is much greater probability of returning the bowel into the abdomen in a good condition, and consequently in a number of cases avoiding a dangerous surgical operation.—*Detroit Review of Medicine.*

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New Operation for the Cure of Varicose Veins.

Mr. Stokes has been recently treating varicose veins on a plan which was suggested to him by Sir Dominic Corrigan. It occurred to Sir Dominic that as hemorrhoidal tumours are, as a rule, so successfully treated by the application of strong nitric acid, the application of this acid to varicose veins in other situations would probably be attended with equally good results. In a case which is still under observation in the Richmond Hospital, this plan of treatment has been attended with the happiest results. The patient is a young man aged 21, and was admitted into the hospital on the 15th of last month. He had a varicose tumour, of the size of a small orange, on the inner aspect of the middle third of the right leg. It had existed for seven years. He suffered also from a large varicose ulcer, which existed over the inner ankle of the same leg; and there was also a second tumour, formed of a cluster of varicose veins, in the right groin. Mr. Stokes performed the operation in the following way. Pressure having been made above and below the tumour, the integuments were raised from the tumour, and an incision, by transfixion, was made over the veins. The *fuming* nitric acid was then applied to the external coats af the veins. No pain attended this application. On the following day the contents of the tumour appeared solidified at the base; and the acid was again applied. The process of solidification then went on rapidly, the tumour at the same time decreasing in size. A week after the operation, some coagulated blood appeared at the site of the operation; and the following day a portion of the vein came away. This was followed by a slight local inflammation; which, however, after a few days, quite subsided. The wound was then for some days dressed with tinct. benzoin co. and glycerine; and it rapidly healed, as did also the ulcer; and the large varicose tumour in the groin entirely disappeared.—*British Medical Journal, May* 28, 1871, *p.* 550.—*Braithwaite's Retrospect.*

An Instrument to Facilitate Skin-Grafting.

An instrument designed to facilitate the process of skin-grafting was brought into use at St. Bartholomew's Hospital in the early part of last March. It consists of a pair of curved scissors, which are provided on their concave surface with bent forceps. These are controlled by a lever which descends with the separation of the blades, and rises when they are brought together. The movements of these several parts are so concerted that the forceps meet between, and just below, the blades, immediately before the closure of the latter, and then rise between them to such a height that whatever they have seized will be divided from its attachment when the blades actually meet. Thus the whole process of seizing a small portion of the skin, separating, and raising it, can be almost simultaneously performed with one hand. The size of the severed piece of skin is proportionate to the force with which the forceps are pressed against the surface from which it is to be removed.

This contrivance was suggested to Mr. Ferguson, of Giltspur-street, early in the present year, by Mr. Crips, a student of St. Bartholomew's. It has since been in constant use at the hospital, and is very favourably spoken of. Mr. Pollock also has, we believe, expressed his approval of it."—"*Braithwait's Retrospect.*"

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Some of the Ill Effects of Bromide of Potassium.

"Under this heading Mr. T. O. Wood, Medical Superintendent of Dunston Lodge Asylum, publishes a paper, with cases, in the *British Medical Journal* of October 14, 1871, in which *inter alia*, he says its most dangerous effect is when, after a course of comparatively small doses, which do not seem to be taking any great hold of the system generally, or upon the mental symptoms, to control which it is given, it suddenly, and without apparent cause or warning, displays its cumulative effects, and rapidly reduces the patient to a condition of great bodily prostration, and completely alters the character of the mental symptoms. The physical prostration is at once evident. There is great muscular debility; dimness of sight with dilated pupils; irregular gait, the patient reeling as though intoxicated; whilst nausea, vomiting, or purging, with abdominal pain of a low aching character, may also be present, the breath having a peculiar disagreeable odor. Its effects upon the mental symptoms are no less marked. The patient, who was excited, glorying in his imaginary powers of body and mind, becomes despondent, sullen, melancholy, and frequently lachrymose, often even despairing.

In a previous number of the same Journal are cases reported by Witlow Bovis, L.R.C.P., and Dr. R. W. Foss, bearing out these statements, except in regard to the suddenness of the symptoms"—*New Remedies.*

CAUSE OF INFECTIOUS DISEASES.—Dr. Balfour also showed, Med. Chir. Soc. Edinburgh, a piece of lead soil-pipe which had been inserted into an iron pipe just below the seat of the water-closet. The iron had been corroded, and a way of escape thus made for the poisonous sewer gases into the house. This specimen had been removed from a house in which two fatal cases of diphtheria had occurred last summer; and Dr. Balfour stated that in his experience some such source of gaseous leakage had been invariably found, when sought for, in every house where diphtheria, typhoid fever, and other allied disorders had prevailed.—*Edinburgh Medical Journal, December*, 1871.

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Editorial.

Appearance in Buffalo, of Cerebro-Spinal Meningitis.

Within the past few weeks, Cerebro-Spinal Meningitis has made its first appearance in Buffalo and near vicinity, at least, in sufficient frequency to constitute anything like epidemic form; sporadic cases may have been observed and recognized, or passed under other name. The symptoms are varied and numerous, mostly pointing to serious disturbance of the great nervous centre, but thus far, these symptoms have been in many cases quite equivocal, and not unfrequently so feebly marked, as to leave doubt as to the nature of the malady. We have formerly, as now, been treating patients with similar symptoms, and but for the fact of greater frequency, might overlook the peculiarities of the cases, which we now regard as inflamation of the membranes of the brain and spinal cord, and call "Cerebro-Spinal Meningitis," meaning that epidemic disease which has appeared anew in this country, within the last five or six years.

"Spotted Fever," is a name which seems to us wholly inappropriate, and which conveys no rational idea of the nature or location of the disease, and the reasons assigned for ever giving it this name, are entirely inadiquate; "Inflammation of the Membranes of the Brain and Spinal Cord," may be made to mean something in intelligent families; but as there are no "spots" either before or after death, every one is ready to inquire, why call it Spotted Fever? Petechial spots may doubtless occur in this as in all low forms of disease, but if present, they are the result of a condition common to all diseases of low type, and do not diserve to give name to such malady.

It may be interesting to some of our readers if we relate the principal symptoms present in the cases thus far observed, as there has been great differences noticed in different cases, and in different epidemics, in different places.

Some cases commence by a sudden attack, the patient being noticed at first, as having some grave malady; other cases the access is more gradual, the disease not being established and recognizable under three or four days. Pain, and especially pain in the head is one of the first and most constant symptoms of an attack. It is increased by motion, and is generally referred to the neck and head. Pressure does not generally increase the pain referred to back and neck, but as most of the cases have been in children, it has not been easy to determine the amount or location of pain; pain in other parts of body is often complained of. Vomiting is often present from the outset of the disease. Delirium comes on early in severe cases and partial or complete unconsciousness is often soon added; a peculiar unconscious, frequently repeated scream, thought by attendants to indicate pain, has been an unpleasant symptom in a few instances.

Oscillation and turning upwards of the eye-ball is an almost constant symptom; the pupil varying, at times dilated, again normal or contracted.

Tonic contraction of the muscles of the neck has been noticed in most well marked cases and in some instances a complete general convulsion is an early symptom. The urinary and alvine secretions normal so far as common observation extended, no special examinations having been made.

The respirations are sometimes increased, but in many cases not obviously changed. Bronchitis, with hurried respiration and cough appears frequently as a complication or as a consequence of the disturbance of nerve action. Pulse varies greatly in the same case at different times. At first it may not be changed, it may be some slower than natural or it may be very rapid, 160 per minute; it is often noticed as irregular. The heat of the surface is also liable to the same variations.

The cases thus far observed have either died early, within a few days, or appear slowly recovering, no permanent disabilities. No deafness, or blindness or paralysis resulting. The proportion of deaths to cases cannot yet be determined accurately, but it seems probable that recovery is the rule, and that nearly all cases which survive the first, outset of the disease will recover.

TREATMENT.—It is hardly worth while at the present time to speak upon the subject, and still, perhaps, one word will not be out of place. Quinine, Mercury and Iodine have all been tried as curative remedies. We have given Quinine but observe no very positive effects. Iodine in form of Iod. Potass, and Bromine in form of Bromide of Potassium, are favorite remedies with the profession and possesses at least one important feature—they can scarcely be supposed to do any harm. Opiates would be excluded upon theoretical grounds, but the pain, restlessness and general distress is greatly relieved by anodynes, and we cannot withhold the conviction that they are unproductive of harm, and if carefully selected and appropriately given, answer admirably the most important therapeutical indication. In many cases anodynes cannot be omitted in any consistency with good care—the pain *must* be relieved. The value of medication is yet to be determined by careful and continous observation.

These remarks are based upon early and not very extensive observation, and no very positive opinions are formed. We are ready to change in our views as facts may indicate, but most sincerely trust that our opportunities in Buffalo for studying this disease may be very limited.

We have not spoken a word as to the nature of the disease, as we have had no opportunities to observe the pathological changes which take place in fatal cases.

P. S. Since writing the above, we have seen one *post mortem* examination of a private patient of ours in the General Hospital, who died with well marked symptoms of the disease. The sections were made with great care and skill by the House Physicians and Surgeons, Drs. Fuller and Harrington, and showed the membranes of the brain and spinal cord very beautifully, but we are sorry to add the appearances were normal, or so nearly so, as to throw no light at all upon the causes of death. Examination was also made of all the organs of the Chest and Abdomen and no pathological changes were anywhere observed.

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Resolutions on the Death of Prof. Charles A. Lee, M. D.

The Faculty of the Buffalo Medical College, at a recent meeting passed the following resolutions, on the announcement of the death of Prof. Chas. A. Lee:

Resolved, That we learn with deep pain and regret the death of our colleague Prof. Charles A. Lee, of Peekskill, N. Y., who has been for so many years our associate in medical teaching, and with whom our relations have always been such as to leave only the kindest remembrances and regrets.

Resolved, That we regard the death of one so distinguished for extensive and varied knowledge, so long and well known as one of the venerable dignitaries in medicine as a serious loss to the profession to whose interests he has devoted his life labor.

Resolved, That we tender to the family relatives of the deceased our most heartfelt personal sympathy in their bereavement.

Resolved, That a copy of these resolutions be sent to the family of the deceased and published in the Buffalo Medical and Surgical Journal.

GEO. HADLEY, Sec'y.

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PROMOTION.—We clip the following from *The Sunday Herald and Weekly National Intelligencer :*

"Assistant Medical Purveyor J. H. Baxter was confirmed by the Senate on Thursday last as Chief medical purveyor, U. S. army. This is a position of great responsibility, as the chief medical purveyor has supervision of all matters pertaining to the purchase of medical and hospital supplies for the army. This tribute to a deserving officer, as well as to the volunteer medical staff of the late war, is very gratifying, as Dr. Baxter was the only one of their number who was selected for a higher position than assistant surgeon in the regular service when the army was reorganized after the close of the war, and his selection for this position is an admirable one. We are glad to learn that his promotion will not take him from among us, as he is still engaged in preparing his report of the medical statistics of the late provost marshal general's bureau, which is near completion."

We congratulate Dr. Baxter on his promotion, and also the service on securing so able a man for the important post of Medical Purveyor.

An Annual Exhibition for the American Medical Association.

The undersigned, Chairman and Secretary of the Committee of Arrangements of the American Medical Association, have been authorized to invite attention to the project of an exhibition of objects interesting to the medical profession, to be held in Philadelphia during the next session of the Association. This exhibition has been suggested as a desirable amplification of what has been customary on these occasions; and is expected to resemble, more or less, the displays of this kind which are prominent features of the annual meetings of the British Medical Association.

In accordance with this determination to have an exhibition on the 7th, 8th, 9th and 10th of May, 1872, during the next Session of the Association, the Committee of Arrangements would respectfully and earnestly appeal for contributions of objects to be exhibited—and for other available co-operation—to members of the medical profession, pharmacists and manufacturers of chemicals, to opticians, instrument makers, publishers and booksellers, and to all others who are concerned in manufacturing or dealing in anything related to the study and practice of medicine and surgery and the associate sciences.

They will gratefully receive choice specimens and examples (likely to prove interesting through novelty, rarity, importance or superior character) of drugs, medicines, and other remedial appliances—including special chemicals and pharmaceutical compounds and materials—as well as the apparatus employed in pharmaceutical and chemical processes; also of optical and other instruments of observation and precision; of surgical instruments and implements. of preparations and objects in natural history, including human and comparative anatomy, morbid or healthy; of models, drawings, paintings, prints, and of printed works—of recent date or standard character—on medicine, surgery, and the associate sciencies.

The general plan of arrangement, and amount of space to be allotted to the several departments and collections, will have to be decided by the end of March; and all the objects to be exhibited must be within reach of the committee by the second or third week of April next.

In order, therefore to prevent confusion and disappointment, lists of objects offered for exhibition, and estimates of the amount of space desired for the purpose, will be required as soon as practicable after the publication of this circular.

Communications addressed to Wm. Pepper, M.D., 1215 Walnut street, and F. F. Maury, M. D., 1218 Walnut street, the Sub-Committee on the Exhibition, will receive immediate attention.

EDWARD HARTSHORNE, M.D.,
Chairman of the Committee of Arrangements,
1439 Walnut St., Philadelphia

[Attest, Jan. 20th, 1872.]
D. MURRAY CHESTON, M.D., Secretary,
25 S. 16th St., Philadelphia.

Medicines Received.—We have been using for some time preparations from the house of Wm. R. Warner & Co., Druggists, Philadelphia, and can recommend them to the profession as both elegant and reliable. We have given their sugar coated pills and granules a thorough trial and have in every case been perfectly satisfied with their action.

We cannot speak from personal experience concerning their truly elegant fluid extracts, but from the high standard which the house occupies do not hesitate to recommend them as truthfully representing the qualities of the drug.

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Books Reviewed.

Fireside Science: a series of popular and Scientific Essays upon subjects connected with every-day Life. By James R. Nichols, A.M., M.D. New York: Hurd & Houghton, 1872. The Riverside Press, Cambridge.

This is a handsome collection of popular Essays upon scientific subjects of interest to the popular mind. The opening essay is upon the subject of the Origin and Nature of Springs. It gives the geological formations observed where springs abound, the different varieties of springs, and the locality of the most note-worthy. The chemistry of a Cigar, and of a pint of Kerosene are, each in their turn, the subject of an essay, and will prove of interest to the consumers of those articles. The article on the Lost Arts, though perhaps not so extended and searching as the lecture of Wendell Philips upon the same subject, is more adapted to the younger minds of the " Fireside Circle."

The Chemistry of the Human Body, and Infectious Germs, are articles which will, no doubt, be of more immediate interest to the medical man; although not as extended and minute as a purely scientific essay would be.

Dr. Nichols has, in a few well chosen words, said a great many things which will be of interest to both old and young in the " Family Circle."

War Department: Surgeon-General's Office Circular No. 3. *Report of Surgical Cases in the Army from* 1865 *to* 1871. By Geo. A. Otis, M.D., Assistant Surgeon U. S. Army.

Surgeon Otis in this Circular has collected, and arranged in order, the Surgical cases occurring in the U. S. army in the years mentioned. He has given an extended account of the more interesting cases, and has illustrated many of them with cuts. Did space allow, we should be very happy to give a more extended notice of these cases, some of which we find very interesting. As Dr. Otis says in his report to the Surgeon-General, " The cases in each category are not sufficiently numerous to warrant any very important generalizations; yet every such contribution must be of value in adding to the mass of facts from which important inferences may be hereafter deduced."

Proceedings of the Royal Society, London.

We have received from the printers and publishers, Messrs. Taylor and Francis, London, through Mr. Wm. Wesley, Agency of the Smithsonian Institute, 28 Essex Street, Strand, London, No. 123 to 129 inclusive, of the Transactions of the Royal Society.

The proceedings contain essays and papers of much scientific interest, and will form a valuable collection of scientific papers, serving to show the searching interest in matters of science manifested by our brethren across the water. The Royal Society has long been known as one of the most distinguished learned Societies of the world, and their proceedings will be read with interest by all scientific men.

Transactions of the Twenty-Sixth Annual Meeting of the Ohio State Medical Society, held at Cincinnati, April 4, 5 *and* 6, 1871.

The volume of transactions of this Society comes to us in a very neat and compact form, and contains many papers of interest. The address of the President, Thad. A. Reamy, M. D., of Cincinnati, is an intelligent and interesting survey of some of the leading questions of the day; the much talked of questions of Medical Education, and Women Doctors come in for a share of treatment, and are handled in a very able manner. Among the many very interesting papers we notice one on "Some points in Uterine Therapeutics," by Edward B. Stevens, M. D., Cincinnati, Ohio.

Dr. J. R. Black, of Newark, O., presents a somewhat lengthy, but very interesting paper on "Sanitary Science" which contains many valuable suggestions. We congratulate the profession of Ohio on the extremely interesting volume of transactions which they have produced.

Headaches, their Causes and their Cure. By Henry G. Wright, M.D., M.R.C.S.L., L.S.A. From the Fourth London Edition. Philadelphia: Lindsay & Blakiston, 1871.

This work is in many respects of much value, and will not fail of being useful in the profession. It is divided into two parts. Part 1st being on the varieties and Symptoms of Headache. Part 2d on their Causes and Treatment. In treating of the Varieties of headache, the author speaks of the late suppers, late hours, and poorly ventilated rooms, of our fashionable balls and parties, as a prolific source of much suffering. Excessive study, or severe mental strain are also spoken of as well known causes. In the part on treatment, the removal of these causes are, in many instances, sufficient remedy, in others, some simple medicine is needed. The treatment which is laid down by the author in some cases is, to our mind, somewhat complex, and rather out of date. In many instances we believe that by Hygienic means alone, or with the aid of simple remedies, he might accomplish as much as he does with medicine.

On the treatment of Pulmonary Consumption by Hygiene, Climate and Medicine, in its connexion with modern doctrines. By James Henry Bennet, M. D. Second edition. New York: D. Appleton & Co., 1872.

This is a very interesting and valuable monograph, which places the ideas of the author in a clear and plain manner before the profession. The views of the author on the origin of Pulmonary Consumption, are those generally adopted by the profession, namely, those of Prof. Bennett of Edinburgh. His treatment of Consumption embraces those great requisites to life and health; cleanliness, fresh air, good food, and out door life.

We can not but think that if these ideas were more fully carried out, more success would attend the treatment of this disease. We recommend the work to the careful consideration of the profession.

Transactions of the American Medical Association, held at San Francisco, Cal., May, 1871.

Volume XXII of the transactions of the American Medical Association comes to us filled with much interesting matter. The meeting at San Francisco was somewhat disturbed by the " Woman Question," which is spoken of to some length in the able address of the President, Dr. Alfred Stille. The Committee on Medical Education, presents an exhaustive and able report, and suggest some excellent reforms in the manner of educating young men for the medical profession. Many of the papers presented to the Association show commendable care and thought; and all are valuable and interesting.

Neuralgia and the Diseases that resemble it. By Francis E. Anstie, M. D., Lond. New York: D. Appleton & Co., 1872.

Dr. Anstie has produced a very valuable work on Neuralgia. In the introduction he speaks briefly of Pain in General and gives some very fine distinctions as to the varieties of pain and their causes. Closing his introductory remarks he gives the following distinctions:

1. Pain is not true hyperæsthesia; on the contrary, it involves a lowering of function.

2. Pain is due to a perturbation of nerve force, originating in dynamic disturbance either within or without the nervous system.

3. The susceptibility to this perturbation is great in proportion to the physical imperfection of the nervous tissue, *until* this imperfection reaches to the extent of cutting off communications, (paralysis.)

Part I—Is a very complete treatise on Neuralgia. Treating of its Clinical History, Complication, Pathology and Etiology, Diagnosis, Prognosis, and Treatment.

Part II—Treats at some length of the diseases that resemble Neuralgia, and is a valuable accompaniment of the first part. The work will, no doubt, hold high position in medical literature.

A Practical Treatise on Bright's Diseases of the Kidneys. By T. GRAINGER STEWART, M. D., F. R. S. E. New York, Wm. Wood & Co., 1871.

Having added to his stock of knowledge, by three years of observation in this department of Medical Investigation, Dr. Stewart hastens to place it before the medical world, in the form of a revision of his excellent work on Bright's Diseases. The book before us is written in a plain and concise manner, and bears evidence of coming from the pen of a man who knows "whereof he speaks."

The work is illustrated by nine well executed plates. Beside the regular consideration of the subject, three subjects of special interest are treated of in supplementary chapters. The profession are under many obligations to Dr. Stewart, for his interesting and valuable work.

Transactions of the Medical Society of the State of Pennsylvania, at its Twenty-Second Annual Session, held at Williamsport, June, 1871.

The transactions of this Society as usual contains much of interest. Many of the papers, present evidence of thought and study and are of interest to the professional reader.

The address of the retiring president, Prof. S. D. Gross, M. D., LL. D., of Philadelphia, is of much interest, and contains many sound and valuable suggestions. We take the liberty of inserting the following extract from the presidents address:

> " Whoever has studied the subject must be convinced that quackery is inherent in our very nature; that it constitutes " part and parcel " of our very being. Mankind naturally possess a strong avidity for the marvellous, and a love of novelty often incites them to the commission of acts of which, when sober sense resumes its sway, they are heartily ashamed. We read with horror of the days of witchcraft, and are struck dumb when we find that an English judge, Sir Matthew Hale, hardly two centuries ago, sentenced two women to the gallows for this alleged crime. Is there no superstition, no bigotry in our age? Has not the witchcraft of two centuries ago its counterpart in the spiritualism of our times? If it do not, like its kindred delusion, send people to the scaffold it sends them to the mad-house and to a permature grave. Mesmerism, clairvoyance, and other follies still have their advocates; many persons still firmly believe that disease is a demon that can only be expelled from the system in which it has taken shelter by the power of religion, pow-wowing, or some other mysterious rites; war, with all its horrors and atrocities, is as much as it was in the darkest ages of the world one of the approved resources of so-called civilized nations in the settlement of their disputes; and bigamy, in its most revolting form, is practised under our own eyes, really the only institution on this continent protected by government!
>
> Physicians, like lawyers, divines, and other people, must take the world as they find it. Human nature is much the same everywhere, and it is not an easy matter to cope with its frailties and prejudices, its follies and its crimes, its bigotry and superstition. Cherishing an enlightened trust in Providence, let us calmly and patiently perform our task upon earth, doing all we can to improve the healing art, to dignify and ennoble our profession, and to benefit the human race."

Modern Medical Therapeutics. A compendium of recent formulæ, and specific Therapeutical directions. By GEO. H. NAPHEYS, A. M., M. D. Third edition, revised and improved. Philadelphia: S. W. Butler, M. D., 1871.

This is a convenient and valuable work on therapeutics, and cannot fail to be of use to the student and practitioner of medicine. It is largely composed of selections from experienced medical men in relation to therapeutics.

The anthor in the preface says; "I have given the most space to affections, in which treatment has been found to be of most avail. All previous collections of therapeutical facts have been arranged with reference to the articles of the Materia Medica. The nosological plan here adopted, is, I believe, the most convenient to the busy practitioner. It enables him to turn at once to the therapeusis of a disease."

Although somewhat novel, the plan of the author is well carried out and the result is a valuable work on therapeutics.

Medical Thermometer and Human Temperature. By C. A. WUNDERLICH, M. D., abridged by Edward Seguin, M. D. New York, Wm. Wood, & Co.,

Dr. Seguin in his translation of Prof. Wunderlich's book, has presented the work to us in an abridged form. This abridgement seems to us to contain in a small compass the main points on Medical Thermometry. The need of a work of this character, has long been felt on this side of the Atlantic, and this work will no doubt be received with pleasure.

The translation before us is open to criticism, on account of the foreign idioms used in some instances, and also on account of some portions being included in the abridgement, which might be better supplied from matter left out. Nevertheless it will be gladly received by the American Profession, and will help to a considerable extent to fill up the void in the literarure of this department of medicine. We recommend it to our readers as a valuable addition to their libraries.

A Hand-Book of Therapeutics. By SIDNEY RINGER, M. D., etc. New York, Wm. Wood & Co., 1871.

The author in the new edition of his Hand-Book of Therapeutics, has made a very thorough revision of the work, and has added much to it which is of value. He has followed the plan of Buchheim, and has produced a work of much value to the profession. That this is the case seems to be proved by the short time which has transpired, (about a year ago, we believe,) since the first edition was published. The present one contains much additional matter, and having undergone revision, and the corrections, which experience would indicate, comes to us in the form of a very useful work on therapeutics.

Boylston Prize Essay, 1871. *Diseases of the Skin; the recent advances in their Pathology and Treatment.* By B. JOY JEFFRIES, A. M., M. D. Boston: Alex. Moore, 1871.

Dr. Jeffries has in an original and intelligent manner, placed before us a very interesting statement of the recent advances in the Pathology and Treatment of Skin Diseases. After reading his essay, we come to the conclusion that he is possessed of that rare gift of saying many things in a few words. His treatment of the subject is brief, original and to the point. In speaking of the vexed question of classification, he says: "A teacher may, most usefully for the student, devote, hours to a thorough and practical description of the symptoms and treatment of the various phases of eczema, without once alluding to where it, as a whole, or its several appearances, belong in any one's classification. Some general order of bringing cutaneous diseases before his class is, of course, necessary for a teacher; but the less the student hears of the special order or classification, and the more of the particular disease, the more successful will be the treatment of his cases, and the better will he be enabled to classify for himself, whilst at the same time he has become trained in observation."

It must not be understood that Dr. Jeffries wishes to throw aside all classification; but that he wishes the pathology and treatment of disease to be of the first, and the classification of secondary consideration. The book is full of valuable intelligence and should not fail to be in the hands of those of the profession who wish to live up to the times.

Anæsthesia, Hospitalism, Hermaphroditism, and a proposal to stamp out Small Pox and other Contagious Diseases. By Sir JAMES Y. SIMPSON, Bart., M. D., D. C. L. Edited by Sir W. G. SIMPSON, Bart., B. A. New York: D. Appleton & Co., 1872.

The first half of this work is occupied with an exceedingly interesting history of the discovery and use of Anæsthetics which will be of exceeding interest to those of the profession who are curious on the subject, and is ably treated by Prof. Simpson. The views of Prof. Simpson on Hospitalism form a series of interesting papers, which, however, are perhaps not quite as complete as their author would have desired to make them had life been spared. Hermaphroditism, and a proposal to stamp out Small Pox and other contagious diseases serve to complete one of the volumes of a very interesting and valuable collection of the writings of the late Prof. Simpson.

We have received from J. M. Toner, M. D., of Washington, D. C., several diagrams illustrating,

1. The proportion of males to females of the same age in the U. S. from the census of 1860.

2. The ages at which an excess of one sex over the other exists in the different states and territories of the U. S. from the census of 1860.

3. The proportion of white children under 15 years, to the 1000 females be-

tween 15 and 40, from 1800–1870. To show the fact of the decline of the birth-rate in the U. S.

IV. The aggregate mortality in the U. S. for the year ending June 1st, 1860·
These diagrams are carefully constructed, and serve to show at a glance the several facts which they are intended to represent.

Books and Pamphlets Received.

A Treatise on Human Physiology, designed for the use of students and practitioners of medicine. By John C. Dalton, M.D. Fifth edition revised and enlarged, with two hundred and eighty-four illustrations. Philadelphia: H. C. Lea, 1871. Buffalo: Thedore Butler & Son.

An Introduction to Pathology and Morbid Anatomy. By T. Henry Green, M.D., London. Illustrated by numerous engravings. Philadelphia: Henry C. Lea, 1871. Buffalo: Theodore Butler & Son.

Physiology of the Soul and Instinct as distinguished from Materialism. By Martyn Paine, A.M., M.D., LL.D. New York: Harper Bros., 1872.

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ADDRESS.

Gentlemen of the Graduating Class:

It is by the appointment of the Medical Faculty of this University that I have the honor of addressing you upon this interesting occasion. Always proud of any opportunity of acting as their representative, I esteem myself peculiarly fortunate at this time, when the object is to welcome your entrance into the ranks of our profession. The pleasure ordinarily afforded is greatly lessened, however, by the painful conviction of inability adequately to discharge the important trust thus imposed; and in an humble effort to fulfill the task assigned me by the partiality of my colleagues I confidently claim from them and yourselves the same indulgent forbearance which has been extended to all my labors.

Permit me then, gentlemen, in behalf of my colleagues, and for myself, to express a cordial sympathy with you in this most important era of your lives, and to detain you with a few desultory remarks relative to your future career, before our final separation. We have brought our arduous and important labors to a close, and are about to take leave of each other. Our familiar greetings and interviews, the efforts to impart and receive instruction, must now terminate. To me these separations, these annual partings—landmarks in the pathway of life—beacons on the passage to the grave—are full of interest, in which pleasure is commingled with sadness. Saddened I confess I am at the reflection, that this is our last interview in our present relations, relations in which I have so many reasons for the expression of grateful emotions, for the considerate respect and forbearance extended to my imperfect efforts. I have felt conscious that your sympathies were with me, and it has cheered me in my undertakings, and inspired me with delight and confidence, and their interruption will produce unfeigned regret.

On the other hand, it affords us sincere pleasure to know that you have grown in knowledge beyond the need of our assistance, and that you are about to take your flight into the world of action, each trusting to his own wings, and selecting his own course in the broad expanse before him. In our sympathy with you at this time, we live over again one of the happiest and most exciting moments of our own existence. The whole picture of your emotions is indelibly traced upon our memory. We participate in the proud satisfaction of your retrospective view, in the delight of your present relaxation from toil and anxiety, in the buoyant gladness of your new independence, in the lofty aspiration, the hope, the confidence, the joy of your eager glance into the future. The congratulations of your preceptors, therefore, on this occasion are not the mere expressions of cold formality; they are the heartfelt overflowings of a real participation in your feelings, and of a true interest in your welfare.

One parting word of counsel, dictated by such motives will, I am sure, be received in the same spirit of kindness in which it is given.

In the very outset, then let me exhort you to imprint indelibly upon your minds the conviction that your success in life will depend mainly upon yourselves. Trust nothing to fortune or to the fancied advantages of your position. Labor diligently, in your intervals of leisure, to render yourselves more competent for the performance of your professional duties; guard your sentiments and conduct so as to command the respect of honorable men; and endeavor to cultivate such an exterior deportment as may render your presence acceptable to those whose society you may desire. Thus equipped, if you watch diligently the current of affairs, neither imprudently rushing into the midst of adverse events, nor allowing any favorable opportunity for honorable action to pass unimproved, you will as certainly prosper in your professional undertakings, as the seed sown in a good soil, and nurtured with due care, will spring up and ripen into harvest. The moral world is governed by laws scarcely less uniform in their operations than those which regulate the physical. Much less is justly ascribable to accident than young men are usually disposed to imagine. The successful often feel a pleasure in considering themselves the favorites of fortune, while the unsuccessful are ever willing to shift off from their own folly or carelessness the responsibility of their failure; but there are few men so purely fortunate as to be unable to point to some prudent forethought, or wise decision, as the real origin of their success, while perhaps not one thriftless, disappointed man can be found who cannot recall numerous instances in his experience, of time misspent annd opportunities neglected. Keep this maxim always before you, that under Providence you must rely chiefly upon your own unaided efforts, and with the inflexible purpose of leaving no honorable means untried of promoting your advancement, you cannot fail of obtaining, if not the summit of your ambition, at least a respectable station in life, with a competent provision against all ordinary calamities.

Not that I desire your attention to be exclusively occupied with your own worldly prosperity. It is not necessary that the whole channel of your soul be compressed within the turbid and narrow limits of selfishness. By a wise ordinance of Providence the exercise of an expanded benevolence is not incompatible with our true interests. It turns away the thoughts for a moment from the schemes of profit or ambition, and more than repays the loss by its cheering effect upon the heart, and its ennobling influence upon the character. "The overflow of kindly feeling, at the same time that it enriches the soil upon which it spreads, purifies and sweetens the stream from which it proceeds, and to which it again returns." If actuated, therefore, by no higher motive than a regard for our own happiness, we should cultivate good will to others, multiply friendly relations with objects around us, and throw out in all directions the cords of endearing associations, by which we may reciprocally draw and impart refreshing sympathy and useful support. In the future prosecution of your professional labors you will find that medicine, when rightly pursued as a calling, is by its very nature beneficent; its constitution is charity, its aim to rescue the afflicted, to suspended or avert the stroke of death, to restore to health and strength, and ease the victim of sickness, debility or pain.

The first application which I shall desire you to make of the habits of industry which you have been recommended to cultivate, is in the continued prosecution of your professional studies. It is true that this day is the closing scene, the crowning result of your course of collegiate study. But I need scarcely say to you that you can add to the stock of knowledge which you now possess of the healthy and morbid movements of that wonderfully complicated machine, the nature of which has been for a few years past the object of your earnest inquiry. It has indeed been well remarked that the moment a practitioner ceases to be a student, he is no longer worthy the confidence of the public. The life of a physician can only be truly useful and honorable when it is unremittingly employed in determining the truth of theoretical opinion by observation; and in improving the value of practical suggestions by the test of experience. You must not be idlers; stand still and you are left far behind; swim on the flood of improvement or you will be cast on the shore among the useless rubbish. No matter what may be your abilities or attainments, they cannot be developed without a certain degree of reflection and mental discipline, and although this amount may vary according to the precise capability, no marked development can occur in any case without study. The extensive improvements which are constantly taking place in the different departments of medical science render it utterly impossible for any practitioner to pursue his avocation with satisfaction to himself unless he bestows upon every case that demands it a degree of scrutinizing investigation, which is needless to the empyrical pretender. Ignorant of the operations of the animal economy, he prescribes recklessly, and should the morbid condition become aggravated, he sees not the connection between the agent employed and the mischief effected. Remaining in a state of blissful ignorance, he consoles himself perhaps that his patient has fallen a victim to a malady, the fatal effects of which no human efforts could have averted. How blissful indeed compared with the anxiety that rests upon the mind of the philosophical practitioner. Aware of the manner in which the functions of the economy are executed in health; equally aware of the aberrations that constitute the diseased manifestations; instructed from his own observation, as well as from the recorded observations of others, of the results which his various therapeutic agents are capable of effecting, he weighs carefully and hesitatingly the symptoms that guide him to the formation of his indications of treatment. Sensitively alive to the safety and welfare of his patient, and to the relief of his sufferings, what anxiety does he not endure in the application of his remedial measures? What mental uneasiness does he not experience until he finds that the threatened danger has passed away?

Much is said in modern times in our profession about practical knowledge and practical men, and an effort is sometimes made to establish the false position that he who reads attentively and studies closely cannot be a practical man. There is, unquestionably, a certain tact, a certain faculty of invention and adaptation, a certain amount of common sense which some men do not possess, and without which one cannot become a great practitioner, though he may be well versed in science; but, be assured, the error here lies in the want of this tact, and not in being over-learned. If he knew less, he would be still less capable of practice. Be not deceived by the fact that there may be some indolent men of such native vigor of mind, tempered so justly with common sense, and sharpened by shrewd observation, that without the ordinary literary and scientific attainment, they are enabled to avoid great mistakes, or possibly attain a degree of respectability in the profession. May we not rather ask, how much more well-directed, industrious application of a mind thus gifted to the different sciences pertaining to medicine would have accomplished?

Look into the lives of all the great masters of our art, all who illuminate the history of the past, and you will find them acquainted with the science of their day, and the principles of the art; not mere practical men, if that term be used as synonymous with ignorance. Indeed, gentlemen, I have never known theoretic attainment lightly estimated except by those who did not possess it. Influenced by such opinions it has afforded me unfeigned pleasure in my own department, to witness on your part, a determination to learn the science of medicine before you should attempt to practice the art. True, experience is necessary; clinical observation is, I admit, necessary to the attainment of professional eminence. And, gentlemen, you will profit by your bedside observation precisely in proportion as you have become equipped with scientific armor, which alone will enable you to comprehend what you see. Does not the nurse see disease all her life with no other result but to be self-sufficient? and yet you often meet with practitioners of medicine who boast of a long and extesive experience, having never learned anything, for the simple reason that they did not possess enough science to furnish them a key to the comprehension of what was passing under their eyes. Here, then, was the place for you to learn the science of medicine — the practice you will be learning all the rest of your lives — and you will profit by the latter precisely in proportion as you are well grounded in the former.

Enlightened self-interest constrain us to this course. By so doing only can the practice of medicine be made attractive. He who truly loves his profession and its study, with these just views relative to the manner in which it should be undertaken, possessing the tact and quick discernment which it requires, added to a thorough education, will experience a constantly increasing happiness in studying to improve and exercise thereby his intelligence and reason. The man who pursues the practice of medicine as a mere trade or means of acquiring a living is greatly to be pitied, as he is doomed to drag out a miserable existence, and with the certain result of professional insignificance, and probably of pecuniary disappointment.

By pursuing this enlightened course of constant study only can the practice of medicine be made attractive. When indolence is thrust aside and mercenary motives denied entrance, and we look at medicine simply as a science, it is full of interest, and the study of it is therefore a rich source of gratification. Its subjects are comprehensive in extent and endless in variety. It is intimately connected with all the other sciences. It gathers to itself the resources of chemistry, botony, minerology, comparative anatomy, and physiology; mental philosophy is an important auxiliary, and it levys a heavy contribution upon mechanics and thus fills its storehouse with a variety and abundance sufficient to satisfy the largest and most eager curiosity.

The phenomena of life, even in the healthy condition, are exceedingly diversified, as modified by disease, and by the remedies, which may be administered, their variations are never ending. Superadd the mysterious connection of mind and body, and not only is the field of contemplation still more varied, but a mass of facts of a mingled mental and physical character is opened to the observer, which awaken an intense interest. We often perceive an absorbing enthusiasm manifested in the pursuit of medical science not common in other studies, an enthusiasm which leads its votaries to disregard the loathsomeness of putrefaction, to leave unheeded all the dangers of contagion and infection, and in search of truth, becoming, in some instances, utterly unmindful of their own comforts or necessities.

In addition to a careful perusal of standard works, keep yourselves *au courant* with professional progress by reading the medical publications and periodical journals of the day. Not that I would have you adopt, untried, the various novelties or theories of the hour, but there should be nothing so new that you are not familiar with what is known on the subject. In this way only will you avoid routinism—one of the dangers to which the isolated practitioner is especially exposed.

Whilst your professional studies and engagements should first claim your attention, your general reading should by no means be neglected. You do not return to your several places of abode again to become private citizens. You must now take your position in society as public characters; the public eye will be upon you; your intelligence will be measured by a high standard. You will be expected to act creditably your parts to furnish your quota of instruction at home and abroad, to be useful citizens and agreeable neighbors.

The community will no longer believe a man a genius, possessing an innate knowledge of setting bones or compounding medicines, but will require, before they bestow upon him their confidence, that he possess a respectable share of general intelligence and good judgment. Besides, the exclusive exercise of a single faculty blunts the remainder. Do not, therefore, confine your reading to that which is strictly professional. All studies, properly pursued, are capable of yielding pleasure and advantage; still, as every one must be content to be ignorant of much, it is important that each make a selection of what befits his studies and his profession as well as his partialities. Again, whatever is worth reading at all, is worth reading understandingly, else a habit of superficial reading is acquired, which unfits the mind for reflection and appreciation. The mind becomes obtuse and we read to no purpose, when once this habit is established.—A blaze of light will not enable the blind to see, nor perspicuity make the thoughtless understand. Occupy your leisure hours, then, with your books and keep yourselves prepared to discharge creditably the duties which may devolve on you in any emergency. Exercise a rigid discrimination, however, in the selection of your unprofessional reading. Possibly, straitened means or want of time have prevented your acquiring, whilst pursuing your medical studies, that knowledge of history, of biography, of polite literature, and, above all, that acquaintance with the various events which have transpired in the Republic in which you have the duties of citizen and sovereign to perform, all of which are necessary accomplishments to a well-bred gentlemen; and, if so, avail yourself of the leisure which you will most likely have at command during the first few years of your practice to supply this deficiency. Do not understand me as deeming these remarks necessary from any imperfections which have been discovered as specially pertaining to those included among the members of the present class. No. We all require daily to renew our good resolutions, and to be stimulated to increased efforts by the good example and encouraging words of those around us, and in this spirit only it is desired these remarks will be accepted. Indeed, I should not deal honestly with myself, did I not admit that I have had the pleasure of seeing assembled in the halls of the University of Buffalo, during the past season, the most intelligent body of young men with which it has ever been my fortune to be associated. With such illustrations and proofs of the adequacy of the means of instruction afforded by this institution no fears need be entertained of the ultimate realization of the most complete success which its most ardent friends could desire.

With honest pride may the faculty of their appointment ask those generous citizens who have so liberally contributed to the permanent establishment of this, the first enterprise of the kind ever undertaken in this great commercial city, here to behold the fruit of the tree which they have planted, as conclusive evidence that their beneficence has been judiciously bestowed. Would that the prosperous condition of the medical department, whose ultimate triumph has long since been placed beyond a contingency, might arouse a spirit of liberality in the citizens of Buffalo which alone is necessary to accomplish that great desideratum—the organization and establishing on a permanent basis the academic department of this university.

From you, young gentlemen, it may be added, shall we be content to receive the measure of our success, having full confidence in your integrity and capacity, and believing that you will at least have perceived an honest desire to spread before you plain practical truths in an unvarnished and simple guise. Ever satisfied that our success should be commensurate with our merits, we do not shrink from impartial comparison with our much respected sister institutions. On the part of this institution be assured, that as our star is in the ascendant, so is it the deliberate determination of the faculty of this university to maintain it in a position second to none in the country. In many things essential to an elevated standard of medical education, the founders of this college claim to have led the way in reform and improvement. Convinced that by increasing the facilities for a more thorough and efficient course of instruction, as well as by making a high standard of attainment requisite to the reception of its honors, the true interests of the student and school are alike consulted; our course, hereafter as heretofore, shall be onward and upward.

Actuated by such motives, encouraged and sustained by such demonstrations as are now before me, can there be any doubt that the same talent and industry, by persevering in the course already so successfully pursued, will bear aloft the reputation of this institution, and enable you ever with filial pride and exultation to point to the elevated position of your *Alma Mater*.

But, to proceed in the duties of admonition and counsel. The first caution which I would give you, in the pursuit of your professional avocation is, to avoid quackery yourselves. For, I regret to be compelled to admit, that quackery is not entirely confined to the unlearned; there are those "who know the right, but still the wrong pursue." The forms which this *hydra headed* monster assumes are endless. The material out of which they are evolved is, however, essentially the same in all ages and countries. Certain medical errors, which are common to man everywhere, constitute its basis.

When some men come to the subject of medicine they exercise their credulity only, laying aside all those tests which they commonly apply to sentiments and opinions for their analysis. Even those who exhibit great stability and acuteness of mind, sifting evidence and rejecting plausible error on other subjects, are often seen to be "blown about by every wind of doctrine" in medicine. We, therefore, console ourselves with the reflection, so far as the laity is concerned, that it arises in part, at least, from a peculiar fondness, which exists in some minds, for the marvelous, and that those who run after nostrums and the various isms of the moment here, would, in other countries, impelled by the same blind faith and ignorance, make their Meccan pilgrimages to kiss and bow down to consecrated relics.

Do not, however, resort to denunciation as a remedy for this evil, when you encounter it in your professional pursuits. This would but confirm ignorance in obstinacy and lend its advocates another weapon by raising the cry of persecution. Seek rather to communicate information on the various subjects which distinguish science from quackery, enable them to look through the shallow covering which conceals its deformities and perceive that *their* interests and not *yours* are involved in the question. Remember the opinion enunciated recently on a similar occasion by my able colleague, Prof. Moore, "that men of science are rarely the victims of quackery," and instil into their minds scientific principles as opportunity is afforded.

Although occasionally an old prejudice against one mode of practice, or against one class of remedies or another, is revived and obtains an ephemeral popularity; still do we believe that the march of public confidence in scientific acquirement is steadily onward, and that it advances exactly in proportion, as the mass of community itself becomes enlightened. To this general rule, I know of but one exception, and that pertains to that most responsible of all professions, the clergy. It is doubtless true, that no class of men have done more harm by giving certificates of cures to quack medicines, than clergymen. Fearful as the responsibility which they thus assume in encouraging heterodox opinions certainly is, we can find much charity for their error. We must bear in mind that mingling little in the world they are proverbially credulous. Hence, sympathizing with the apparently relieved sufferers, whom they meet in the discharge of their parochial duties, they listen to their glowing narrations of their supposed cures; and, without examining their statements, are induced often to furnish certificates to the shameless pretender. Again, aware of the value of these certificates in giving currency to their panaceas, the impostor importunes the influential divine for his name with a pertinacity not easily dismissed, and a reluctant assent is often yielded, forgetful that the lives of their fellow beings are but too often the sacrifice. Without dwelling longer upon this point, I will leave all unacquainted with medical science, merely citing for their reflection the remark of one of the most learned and devout men who has ever lifted the voice of warning from an English pulpit. He says: *"I have often times, not without wonder and indignation, observed the strange confidence of empyrics in physic, that dare venture on the practice of that noble art which they do not at all understand, considering how, for a little paltry gain, they shrewdly hazard or rather certainly destroy the health and lives of men; and I have judged them worthy of as capital and ignominious punishment as those that kill men on the highway."

But, though we may be inclined to regard these opinions, when advanced by those out of the pale of the profession, with great leniency, and pity the evil consequences which must sooner or later follow from

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*Bishop Bull.

their propagation, no palliation can be claimed for *professional* unfaithfulness. To the treacherous brother who, possessed of all the light necessary to see the deep abyss into which he unhesitatingly plunges all those who confide in his sagacity, no hope of extenuation or mercy can be extended. Can he ask for our charitable opinion who, lured on by no other motives than the desire of completing a successful career of deception by amassing a princely fortune at the expense of human life, with a full knowledge of the terrible dangers to which thousands must be subjected, to accomplish his nefarious purposes, can *he* ask us to witness, unrebuked, this effort to commend the poisoned chalice to the lips of his unsuspecting fellow mortal? But, gentlemen, I trust there can be no danger of such unmitigated defection, of the commission of such a flagrant sin under the rays of a full blaze of light.

There is, however, a more insidious form of quackery against which the younger members of our profession require to be cautioned. It pertains to our *professional* intercourse as well as to our intercourse with our patients. Where this *spirit of quackery* exists, it will be manifested in concealed efforts to promote our own advancement by unfavorable comparisons instituted concerning other practitioners, prompting to cunning arts to deceive the public, and it is in nothing more frequently observed than in an over-weening desire for reputation, with an indifference to the grounds upon which it is based, producing a competition among physicians resting, often, upon issues which are utterly false. Under such circumstances medicine is followed as a mere trade. Neither the public welfare or the development of truth is made prominent in pursuit; and credulity is fostered, furnishing ample oportunity for the dissemination of empyricism. The eradication of this tendency to a base self-aggrandisement is a work of reform which commends itself to your earnest consideration. Let competition always be honorable, without descending to the low arts of the mere pretender. Remember, with classes as with individuals, it is impossible to secure the respect of the community for the profession unless we preserve our own honor and self-respect. Lay aside all narrow and selfish motives, and cultivate that *esprit du corps* which will lead you to act in unison for the good of the profession, as a whole. By respecting ourselves and the reputation and honor of other members of the faculty, only, can we hope to inspire public confidence.

The community have not very correct ideas of the rules of honorable intercourse among physicians, and are frequently disposed to cast contempt upon all observance of medical etiquette. Be not tempted into an infraction of these rules, however, in consequence of the obtuseness of public sentiment on this subject. Rely upon it, these are alike necessary for yourselves and for securing the safety of your patient. Let these necessary rules, then, as adopted by the great American Medical Association, be engraven on your forehead. Think of them when you rise up and when you lie down, and when in the highway of your professional labors, and observe them with scrupulous exactness. Remember that you go forth to do battle against empyricism, honoring your *alma mater*, and securing to yourselves, I trust, well merited riches, and a good name, more precious than rubies. Aye, a good name! But do not flatter yourselves that your utmost efforts to deal justly, your untiring vigilance to govern yourselves in your professional intercourse, by the strictest rules of medical ethics, will effectually secure you against the envenomed shafts of jealousy and envy. No! be not disappointed! Success is certain to call down upon you unmerited and unmeasured scandal, which is the only weapon within the reach of little minds, and of which it is a certain indication. But, gentlemen, permit me to enjoin you never to allow yourselves to be goaded into retaliation. Bear in mind that the honor and dignity of the profession are at stake, and that nothing can detract so much from the confidence which the public extend to it and through it to yourselves, as professional bickerings and jealousies. Detraction will but lend increased strength to empyricism, and drag those who indulge in it to a level scarcely above the unblushing charlatan. Never yielding to despair, always place before you high scientific attainment as the only end worthy your ambition in this world; and, in an honest and persevering effort in its accomplishment, you will find little time or inclination to turn aside for the purpose of refuting any of the vile machinations which a successful course is sure to excite against you. Besides, at the very best, this were but labor lost, for truth is mighty and must sooner or later prevail, and seldom will it occur that a slanderous device does not recoil upon the head of its inventor; and the opinion of the virtuous and reflecting, in the form of retributive justice, suspends him upon that gallows which he had erected for another.

Remember, then, that the profession of your choice has claims upon you which you cannot honorably disregard, and that your true course of policy and peace of mind lie in the same direction; and, above all, remember that this is the rule given by Him who, when he was reviled, reviled not again; remember, I say, all these things, and never allow yourself to be provoked to speak harshly of your erring, misguided, thoughtless, but envious professional brother.

It can scarcely be necessary that I remind you of the importance of temperance and sobriety, of your obligations to secrecy, discretion and honor. Into your hands the husband and father entrust those whose honor is more dear to them than life, and which you must sacredly preserve. Into your keeping will be confided the occurrences of the sick room, where all restraint is thrown aside, admitting you into the inmost sanctum of their hearts; hence the first step in the study and the closing act in the practice of medicine should find your lips sealed.

Nor can it be needful that I dwell upon the importance of attending to your address and manners, so that they may be liberal and polished. That in your intercourse with the sick you be compassionate and gentle, bearing the contradictions, complaints and disappointments incident to their infirmities with equanimity. Often will you be required to gratify whims and caprices of the most unreasonable character. Comply with them with apparent cheerfulness wherever you can do so with propriety; but never allow your flexibility to induce you to consent to that which, in your opinion, is contrary to the interests of your patients, however pleasing it might be to their inclinations. Too great pliancy not only endangers the immediate welfare of the patient, but lessens confidence and is succeeded often by contempt and estrangement.

In the familiar intercourse which almost necessarily obtains between the physician and his patient, what an infinite responsibility does he incur in the principles which he inculcates in the families of his charge. How necessary that he should be careful in the expression of his opinions. At what high ends should he aim by his daily example. How important that he should be right in the great moral questions of the day which agitate the community, and that his morality should be strictly that of the Bible. And when he enters the sacred precincts of the sick chamber, how important that sincerity and candor should characterize his every step. The issues of life and death are before him ; he, and perhaps he only, has communication with the spirit in its most momentous hours, and under such circumstances, with no clerical friend, no pious relative near to advise, there is truly a fearful responsibility resting upon him. Should such opportunities be employed to the well-being of those falling under his influence, what an infinite source of happiness is offered to the truly benevolent physician in the opportunity thus presented for exerting a good moral and religious influence. How infinitely superior to any pecuniary compensation would be the delightful reflection that through his instrumentality the abode of misery and vice has been converted into one of virtue and peace. Especially when he is permitted to enjoy as the reward of his efforts the happy thought that through his influence and counsel he has been instrumental in saving the soul as well as the body from death, has he a higher joy than success, however brilliant, and honor, however profusely awarded, and gratitude, however ardent, can impart to his soul.

In conclusion, then, permit me to add that, scattered as you soon will be, whither your duty or inclination calls you, to the north or to the south, to the east and the west, over this widespread country, let me affectionately solicit, for my colleagues and for myself, that your thoughts may occasionally revert to those whose delightful office it has been to guide you in your preparatory labors, and whose pride and pleasure it has been to remove from your path all obstacles to your onward progress. In the name of the council and faculty of the University of Buffalo, I welcome you to the ranks of the profession of which you have this day received your testimonials as accepted members. In their name, and in the name of that profession, I exhort you to follow the dignified calling you have embraced, with zeal, circumspection, and honor. Recommending you to shun idleness and make work attractive; adopting the motto that all who would win must labor for the prize; and in the belief that there is much truth in the maxim that God will help those who help themselves; and that no standard of attainment or success is too elevated when sought by patient and enduring toil; and commending you to the divine blessing for happiness here and hereafter, I bid you all an affectionate farewell.

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ART. I.—*Diphtheritic Croup and its Treatment. A Paper read before the Buffalo Medical Association January 2d, 1872, by* F. W. BARTLETT, M. D.

Mr. President and Gentlemen of the Association:

In fulfilling a promise, made at our last meeting, to give you the result of my observations upon the nature and treatment of Diphtheritic Croup, I do not expect to instruct my medical friends as regards the nature or symtoms of Diphtheria, or its sequelæ. The disease has occurred so frequently of late years, epidemically or sporadically, that even the recently graduated members of the profession may be supposed to be familiarly acquainted with it. Its treatment, though by no means uniformly successful, and particularly in the croupal complication eminently unsuccessful, has yet come to be practically the same with all regular physicians. The mortality in the cases in which exudation is limited to the faucial region has been greatly reduced, as experience has made us acquainted with the nature of the malady, and it is only in epidemics of extraordinary virulence and severity that the ratio of the deaths to cases is large. But even at this day conflicting ideas prevail. The treatment of the exudation is still subject of discussion. Eminent men hesitate to drop the Probang and Nitrate of Silver, and still apply solutions of 30 to 60 grains to the ounce of water, at short intervals to the inflamed tonsils and fauces. Those less sanguine of the good effects of such treatment, use in a similar manner. Solution of tr. ferri chloride, chlorate potass., alum, chloride of soda, sol. ferri per sulph., tannin and other articles of supposed efficacy. That good is affected by these means I do not deny. The views I hold I shall try to modestly set forth, inviting the friendly criticism of my medical associates.

I start with the conviction that a rude separation of the exuded substance usually covering the tonsilar and faucial region, is always a detriment to the patient. The local treatment, if any is made, should be solvent in its nature, capable of application without violence, and not injurious to the system if it passes to the stomach. It is conceeded universally, that the diphtheritic false membrane, plasma, exudation, or by whatever name it may be called is only a local manifestation of a morbid condition of the blood, or the presence in that fluid of specific poison. Whatever its nature, it almost invariably seeks an outlet in the pharynx or parts immediately adjacent.

Has it ever occurred to the gentlemen present to ask the question, why this partiality for the surface mentioned so uniformly appears. Why not appear in the stomach, intestines, lungs, esophagus, conjunctiva, or cutaneous surface, as well as in the parts in the vicinity of the Trachea? I have searched in vain for some explanation of this remarkable fact as regards diphtheria, but nowhere do I find any attempt at a theory; the simple statement seems to satisfy the most inquisitive of our profession. A distinguished medical observer has written that he never saw the exudation in parts removed from atmospheric air. This statement is, I think true, in the case of those who succumbed to the disease in its acute stages. But well attested cases are recorded of diphtheritic heart-clot, exudations, upon the mucous surfaces of the stomach and bowels and other parts reached only by the circulation. Still the main fact is uncontroverted, that in the acute stages the diseased secretion comes by preference to the pharyngeal region. The question as to the period of incubation of diphtheria, is still unsettled. In epidemics of great malignancy, it is probable that the poison soon generates force in the blood, so as to call for a vigorous effort of vitality for its expulsion. But at other times I am of opinion that it may haunt the blood for weeks, and even disappear from the system without any suspicion on the part of the individual that his ill health is due to any such cause; so convinced am I of this, that through the autumn I have given to my patients as a tonic, the tincture of ferri chloride, the symptoms of debility being so similar to what is found in the developed disease. In every case thus treated I have seen excellent results, far superior to those following the use of quinine. Since the great invasion of diphtheria, in 1860 I think, there has been no Autumn or Winter pass without cases of diphtheria of greater or less severity; hence, I infer that it is like the poor, always with us. How far the proving of this as a fact would modify our treatment affords subject for thought. How far the preventive treatment in times of epidemic may avail in individual cases must, of course, largely depend upon its specific effect upon the disease as developed in other subjects. In calling your at ten-tion to a treatment essentially different from that accepted as the best in our times, I am actuated only by a sense of duty to myself, and the profession; ardently desiring to contribute my experiience if of value, and quite as anxious my errors, if such, should be pointed out.

The peculiar treatment I advocate for diphtheritic croup, originated in an accident occurring to one of my patients, and is reported as follows:

In December, 1864, I was called to the lower village of Black Rock, to visit Mr. S. B., a well known citizen. I had no difficulty in diagnosticating Diphtheria of a very malignant form. The tonsils, fauces, posterior nares and epiglottis were thickly covered, with the characteristic exudation. The voice was much altered, the breathing hoarse and croupal, the expression anxious; pulse 120, pain in head severe, debility marked. I sponged the fauces as was the custom, gave quinine, tinc. ferri, chlorate potass., stimulants, beef tea, in short the full and accepted treatment. My patient seemed to do well until the fourth day of attendance; on the evening of that day I found him perceptibly worse. The exudation was pultaceous, of a dark gray color. The pulse 130, weak and irregular. Expression very anxious, and the weakness so great that he did not leave his bed as on other days. I increased his stimulants, urged more beef essence upon him, and was about leaving when he begged that something be given for pain in the epigastric region. For this I recommended a flannel wrung from hot water and lightly sprinkled with spirits terebinthinæ.

Later in the evening Mrs. B. proceeded to carry out my instructions, but as often happens to overworked and weary nurses, forgot and substituted hot turpentine for hot water. This was applied over the entire abdomen. In a few moments pain being insupportable, the patient desired its removal but was told my orders were peremptory and it must remain. It was borne a short time longer and then thrown violently across the room by the patient with the ejaculation "that he would as soon die from the disease as the remedy." Mrs. B. examined and found as she expressed it the whole surface as red as "raw beef." Greatly alarmed she at once covered the surface with soft linen saturated in oil, and impatiently waited my morning visit.

As I entered the sick room I was cheered by the improvement in my patient's voice and appearance, but was soon told by his wife of her sad mistake. On removing the covering from the abdomen I was astonished at the sight that met my view. A surface at least ten by twelve inches in dimension was covered with a thick creamy exudation. The pulse meanwhile had dropped to 90. Inspection showed the intense congestion of the fauces greatly diminished, and the exudation had disappeared from more than half the surface previously occupied. To sum up my patient made a rapid and complete recovery, the denuded surface healing in a few days.

This circumstance made a deep impression upon my mind. and I resolved that in the first great emergency I would put that or a similar plan in practice. Several years elapsed before I had a case I thought urgent enough to demand such treatment. However in September, 1868 one occurred which seemed to justify it.

The patient, a boy of three years, a child of Mr. R. then living on Elk street near the bridge, had been treated for several days by an excellent medical friend who kindly attended my patients at a time of great affliction in my family. An older child had died the week before of so-called pseudo membranous croup, and the patient was under the usual treatment for that affection. On examination I felt satisfied the case was one of diptheritic croup which had progressed to a stage when the most active treatment was required to give any prospect of success. A few moments consultation and the treatment in the case was discontinued, and the usual tonic treatment for diptheria substituted with the following local treatment: A blister size of a silver half dollar was at once applied to the nucha, a tin tube ten inches in length and one-third of an inch in diameter, similar to the blow-gun in use by boys, was procured from a neighboring tin-shop and the fourth part of a teaspoonful of common salt dried and powdered was forcibly blown into the fauces. The disturbance was less than I had ventured to hope. There was scarcely any cough, a little clearing of the throat and expulsion of several teaspoonfuls of yellowish mucus was the only excitement produced. In four hours I called again and repeated the application with similar results and with apparent relief to the breathing which had been performed with great difficulty. Direction was then given to the mother to apply from one fourth to one-third of a teaspoonful every three hours till my next visit. Twelve hours had elapsed when I called again to find the blister formed and commencing to discharge. The respiration had improved, medicine and nourishment had been well borne. The case progressed most favorably, the blister discharging freely and giving but little discomfort to the child. On the sixth day a second blister was applied over the epigastrium which simply furnished a dry red surface, no exudation appearing. By the 12th day the croupal sound had disappeared and the voice was quite restored and ultimately permanently so.

In August of the present year I was called late at night to the house of Mr. M., Pratt street, cor. Sycamore, to prescribe for a child of three years, suffering with what I found to be diptheritic croup. Three days had elapsed without treatment, except a little syrup of Ipecac at intervals. The child was put upon the same treatment as the case just recited and in a few days recovered.

September 30th was called to attend a boy of 13 months, son of Mr. G. D., North Division street, near Hickory. Disease at once recognized as diptheretic croup and same treatment adopted. The parents being informed of the gravity of the malady, I was requested to take counsel and invited Dr. S. F. Mixer. That gentleman agreed with me as to diagnosis, and predicted a speedy fatal issue. At his suggestion quinine in two grain doses every third or fourth hour was added to the treatment, but unfortunately, the remedy was almost invariably vomited. Notwithstanding this the patient rapidly improved in respiration, and the blister upon the nucha in 48 hours discharged freely. On the fifth day of treatment the breathing was natural and the voice nearly so.

The patient insisted on being upon the floor and running about, and was taken into the adjoining room on several occasions. To my great regret in some way the child took cold. The blister ceased to discharge, the congestion and engorgement reappeared in the windpipe, the voice failed, and under these grave circumstances I again obtained the advice of Dr. M. We agreed that the case was hopeless, and the child sunk and died on October 9th, the 10th day of treatment and 12th of his sickness.

November 1.—Was called in consultation with Dr. J. C. Green in the case of the son of Mrs. L., Fulton street, near the bridge, aged about 5 years. The child had been ill some three days and was treated in the usual manner with addition of a vapor filling the room from boiling lime water.

The child was breathing with great difficulty, and had strong disposition to sleep, at which times the breathing could be heard in all parts of the house. In consultation it was agreed to apply the blister and use the salt as in the other cases. The case continued steadily to improve until respiration became perfectly natural and the voice resumed its power and volume. In this case only was the vapor of lime water employed, and of its utility I cannot speak, though upon theory I am opposed to it.

As having some bearing upon the disease we are now considering, I wish to mention an unlooked for result of vaccination in two children of Mrs. L., brothers of James whose case I have just detailed. Eight days prior to his sickness I vaccinated two younger brothers of two and four years respectively. Three days before I saw James, Mrs. L. sent for me to look at their arms upon which a number of pustules appeared. Not only upon the arm but also in the left axilla of the elder boy, and extending some three or four inches downward upon the side was a denuded surface profusely discharging. I was at a loss to account for this until the appearance of diptheria in James made it probable that a like poison affected the younger children. Both have progressed favorably.

December 4th I saw all the children. The denuded surface upon the neck of James was entirely and smoothly healed without a scar. That involved in the younger brother had almost entirely healed, and some half dozen slowly suppurating pustules appeared upon the youngest. The general health of all is excellent.

In this case I have alluded to the vapour of lime water disparagingly. I am satisfied that the vapor of a solution of chloride of sodium, or vinegar and water is quite as useful. I condemn all vapors or applications that tend to excite or irritate the mucous membranes. In the latter days of the treatment I have used as I think, the vapor of tar from hot water with advantage.

November 12.—Was called to attend Nelly N. aged 4 years. Parents reside at 201 Fourteenth street. Ill three days when seen. An uncommonly vigorous child. Put promptly upon the usual general treatment. A blister applied as in the other cases, and salt freely used as before described. The croupal distress was very great, and flannels wrung from hot lard were applied to the chest and frequently renewed. There was but little alleviation of symptoms until the blister commenced discharging, but almost from that hour the improvement was marked. By the sixth day the croupal sound disappeared but the voice was not fully restored until nearly two weeks had elapsed. The amount of discharge from the blistered surface was surprising, presenting the appearance of thick mucilage, and a raised line of demarcation was formed which slowly closed in as the patient improved until it contracted to a point in the centre of the denuded tract and healed without a scar.

November 29.—Was called to visit the son of Mr. P. Ellicott street, aged five years, who had been ill for two days. Found incipient croup and diptheritic fauces. Put him on the treatment as used for the other patients. The blister raised the cuticle well but unfortunately having slipped it denuded a larger surface than I desired. Applied the salted lard in the usual way, but the patient complained so much of the pain that against my conviction and judgment I consented to the substitution of wilted cabbage leaves. A serous exudation was the result, in itself as I reason, of no advantage. I caused the room to be filled with the vapor of vinegar and water which can be most readily done by putting half a pint or more of vinegar with a bucket of water in an ordinary wash boilor, and having a good number of flat-irons kept hot upon the stove, they can be suspended readily one by one from an ordinary stove poker, so as to develop any desired amount of vapor. Under the treatment the patient seemed to do well, but I felt troubled at the failure of the blister to furnish the characteristic discharge. False membranes were from time to time ejected, some portions evidently from the trachea, and one piece, quite two inches in length, bifurcated as if coming from the tracheal and bronchial junction. During the day the patient generally breathed easily, and took medicines and food abundantly, but at night respiration was more difficult. The day preceding his decease and the ninth of the sickness he raised without difficulty quantities of soft yellowish mucilagineous exudations, and was very happy and apparently out of danger. At night croupal symptoms reappeared and difficulty of breathing steadily increased. Strength rapidly declined, and he died at about ten o'clock of the morning of December 8th. The parents kindly permitted a section of the trachea to be made, which was performed by my esteemed friends Doctors Daggett and Folwell. Its mucous surface was covered with soft, thin, semi-organized membrane, easily detached, and exposing a surface which had evidently been in a state of engorgement. I attribute the death of my little patient solely to failure to direct the exudations to the cutaneous surface.

December 26th.—Was called to attend the child of Mrs. S. Charles street. Inspection showed yellowish diptheritic patches upon the fauces and tonsils. Child very hoarse and croupy with purplish congestion of the face.

Treatment the same as of last case only that the salted lard was regularly applied to the surface denuded by the blister. Patient has progressed without halt of any kind steadily to recovery. All difficulty of respiration has disappeared and the voice is quite restored. The blister poured out the thick mucus material which I considered the indispensable condition to give promise of cure in any case.

Could we always control the use of moisture, good results might follow, but I think there is no gain in developing a steam so as to saturate walls, bedding, carpets, &c. We can rarely keep the temperature to the point required, and often neglect converts a warm moist air, particularly in the winter months, into a cold or chilly condition. A child is perhaps more likely to take cold when diphtheritic than when in usual health and the consequences are often disastrous.

It is but fair to say that I have within the year treated other cases than those detailed without resort to blistering. It is mortifying to add that they three in number died. I have never seen a case of diphtheritic croup recover under the usual treatment. I estimate that fifty children have died in this city and vicinity in the last four months of pseudo membranous and diphtheritic croup. It is easy to mistake the latter variety for the former with what misfortune as regards the treatment I need not say. A blister in such a case if of moderate size can do no harm and is valuable as a means of diagnosis.

In the use of a blister some care is necessary. The old plan of keeping up a discharge defeats I think the object in view.

If we accept the opinion held by Chaussier, Gordon, and others that the skin consists but of two parts the Cutis vera and Epidermis or cuticle, we need only raise the cuticle to expose to the action of the air the delicate structure of the Corion or Derma. To apply to this surface unguent Sabinae or other irritant simply causes inflammation and the risk of destruction of the true skin. This I think must have been the error of ancient times and the chief cause of the sloughing said to have been observed.

But is it not true that the irrational general treatment adopted by our predecessors was the chief cause of their ill success. Purging, profuse emesis by Antimony, large doses of Calomel, Bloodletting, the spoliative treatment generally. Is it not possible that in condemning their treatment in *toto* we may deprive ourselves of some useful auxiliary to modern practice? I can assure you gentlemen that no scar has followed the use of a blister in any case treated by me. Diphtheria penetrating a wound involving the deeper tissues is a very different thing from an exudation upon a surface complete in its structure and simply deprived of its usual protection from the air. I have used as an excitant nothing more than finely powdered chloride of sodium in lard. This has not failed in 36 to 40 hour to develope the exudation upon the surface. Once there the simple application of salted lard suffices. The dressing should be changed every 3d or 4th hour and the amount of exudation thrown out is surprising. It has been almost invariably light and creamy in color. In two instances a smart crop of pustules appeared, but in no case has there been disposition to gangrene. For applications to the fauces I use only common salt as nearly anhydrous as possible and powdered thoroughly, of this the 4th part more or less of a level teaspoonful may be used and repeated every 3 or 4 hours, extending the time as the patient improves. A tube from which it may be puffed or blown into the fauces can be readily improvised by rolling up a half sheet of foolscap or a note sheet to the diameter of an ordinary pocket pencil. This I secure with thread at either end taking care to have a distinctive mark so that the end inserted into the patient's mouth need never be incautiously used by the attendant. Putting the requisite quantity in the palm of the left hand it is readily scooped into the end of the tube and the tongue being depressed and the end of the tube so carried as not to spill its contents, is passed well into the fauces and emptied by a smart puff through it.

Should this treatment find favor, a bellows operated by the hand would be preferable. I have rarely found any difficulty so far as the patient is concerned. The salt seems at once to deliquesce, unlike alum and other powders. I attach importance to the use of salt in this way. As a gargle it is far inferior—its chemically combining power having been already greatly reduced. Aside from this I credit it with power as an alterative and antiseptic equal if not superior to any article of the Materia Medica. Since I have adopted it as a remedy in diphtheria I have used no other substance as an application for the throat. Just what efficacy to assign to the constitutional treatment as usually practised is not as yet clear. I have not felt disposed to risk my patient's chances by omitting quinine, iron, alcoholic stimulants, or any form of nourishment. What I desire to state is that this treatment alone did not save a single patient in my practice. By the combination as urged upon your notice I have saved all but two in ten cases, and as I have stated one died from inflammation following cold, and the other from failure to direct the exudation to the surface.

One suggestion more and I have done. It is important not to heal the blister by any application. Let it heal in its own way

Twice I have found my patient's prospects endangered by a cessation of the discharge from attempts at healing the surface.

If the blister prematurely ceases to discharge there is a return of the croupal distress and it is well nigh impossible to excite the surface of the blister without creating inflammation. This coagulates the blood in the vessels of the derma and its usefulness as an eliminating surface is at an end. Another blister must be drawn and the time thus lost may prove fatal to success. The points I claim as peculiar in my treatment are the free use of salt to the fauces to the exclusion of all other applications. The use of blisters to be dressed with salted lard, and the vapor of vinegar and water in preference to any other. Add to this the tonic and sustaining treatment in universal use, and you have my idea of the best, only safe and successful treatment of diphtheritic croup. I am aware that errors are easily made in diagnosis, and certain of my cases may be considered by some to indicate a pseudo membranous rather than diphtheritic condition, but if so the large proportion of cures gives encouragement to try the treatment in the former affection.

Of one thing I feel assurred, namely: that blisters can be safely used, and with my present convictions, I must continue to use them until their inutility has been clearly demonstrated.

If a blister is to be applied it should be at the earliest possible stage of the malady, so as to arrest if practicable the initiatory morbid changes in the mucous membrance of the lanynx and trachea. In later stages of the disease it is far less likely to succeed, and if successful the respiration and voice, particularly, are much more slowly restored.

I trust no one who hears me will consider me as urging this treatment in simple tonsilary or pharangeal diphtheria. Such cases are likely to recover under the usual treatment as stated in the earlier part of this paper. It is to prevent suffocation that I urge the trial of the revulsive and eliminating plan.

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ART. II—*Medical Society of the County of Albany. Semi-Monthly Meeting, March 20th, 1872. Reported by* JAMES S. BAILEY, M. D.

Dr. JOSEPH LEWI, President, in the Chair.

Dr. THOMAS BECKETT, remarked upon *Cerebro-Spinal Meningitis,* and referred to the disease as occurring as an epidemic in the western part of the city within the boundary of his practice.

The symptoms were characterized by extreme headache, and pain in the back of the neck, the patients being unable to bend their necks forward, with constipation and an eruption similar to measles.

Recovery ordinarily took place in the course of four weeks.

Dr. B. detailed several cases, as follows:

Case 1. A young man aged 19, a drummer, turned out on the 22d of February, and took cold, was taken sick the next day; a slight eruption appeared over his bowels, tongue coated, and epithelial deposits over fauces, complained of headache, and was delirious and quite deaf. Gave Bromide of ammonium, and the patient recovered.

Case 2. Complained of pain in the back of the head, which extended half way down the spine, pupils contracted, and coldness of extremities; was insensible, gave aromatic spts. of ammonia with warm mustard baths; patient recovered. Other cases were mentioned but did not present any peculiar symptoms.

Dr. LORENZO HALE, also reported some cases of *Cerebro-Spinal Meningitis,* recently occurring in his practice, with not the same favorable results as Dr. Beckett. About six weeks ago he was called to see two cases in the same family, a boy aged 6 and a girl aged 3 years. They were taken with vomiting and chilliness and pain in the head, bowels constipated; upon the third day an eruption appeared. The girl had no rash, opisthotonos was present in both cases. The oldest case could not hear after the first week; after the second week they were considered convalescent, and the Dr. was discharged by the parents; in less than a week, the Dr. was summonsed in haste; the boy died that night, the girl recovered.

The third case, was attacked with decided trismus which lasted 48 hours; there was no apparent change in the pupil; pulse not more than 90, herpes scattered over the face; no loss of consciousness.

Dr. A. VANDERVEER, mentioned a case he had seen with Dr. O'Leary. The boy was 17 years old, was skating on the river, became fatigued and laid down upon the ice and slept a little, he awakened chilly. The next day went to school, vomited and became delirious. There was tenderness along the spine.

Treatment, Bromide of potash with cathartics, gave chloral to make him rest and nourished him well, opisthotonos was well marked until the 29th day, but very little delirium after the third week. Quinine and pyrophsphate ferri was then given with iodide potash; there was no eruption, the patient will recover.

Dr. Porter inquired whether the eruption was general? and remarked it had not been in the few cases he had seen.

Dr. Estes H. Davis, related two cases of cerebro-spinal meningitis illustrating extremes. Case 1. A lad 10 years of age attended a protracted meeting at 4 P. M., was seemingly in good health, was taken sick in church, and when he came home complained of feeling cold, and had a singular wild expression. Dr. D. was called soon after the attack, called again at 6 o'clock, he was still cold, and his skin looked dusky, was delirious with quick pulse; his delirium soon amounted to frenzy; nothing relieved him; he would stand upon the bed, scream and if not restrained, dive off without regard to personal safety; there was no convulsions. He lived only 9 hours.

Case 2. A young lady 18 years of age, went to bed apparently in perfect health, she awakened in the night and screamed which soon approached a wild frenzy; her head was slightly drawn backward, her eyes had a glairy wild expression, both cases were covered with dark patches of eruptions, her eyes were drawn directly inward, pupils were contracted, skin cold. The delirium continued until 9 A. M., then re-action took place and she was feverish. She was delirious a part of the time for four days, her head was drawn backward nearly to the spine; the Dr. without any authority except his best judgment, bled her moderately, the fourth day after seizure, with decided relief. This was done as a feeler, the blood was heavily buffed and cupped. The next day he took less than a pint of blood, which seemed to improve her, she soon became conscious, her eyes gradually returned to their normal position, her arms were then drawn up, and she had difficulty in breathing and of retaining anything upon her stomach, her limbs drew up close to her body, and she could not endure the pain in having them straightened. In the course of four weeks the discoleration improved, and she was able to go around at the expiration of four months.

Dr. JAMES S. BAILEY reported a case of cerebro-spinal meningitis,that occurred in his practice about six weeks ago;there was present the usual pain in the head and neck, intolerance to light and delerium, opisthotonos, etc. ; treatment, emplastrum cantharides, 2x5 over the spine extending from the neck down, bromide of potash, with diaphoretics alternately, nourished well and kept the bowels open, several physicians saw the case and confirmed his diagnosis.

Just fourteen days from the attack another child in the same family was taken with scarlet fever, and in three days more another was taken. Dr. B. would have mistrusted its having been a case of scarlet fever, although there were involuntary discharges from bowels and bladder, and the patient was left with strabismus, had she not have taken scarlet fever also at the expiration of the 18th day.

Dr. Bailey remarked, as the subject of scarlet fever had been mentioned, he would give some interesting cases recently occurring in his practice.

He was called to see a child who had died suddenly without apparent cause. She had complained slightly for a day or two previously, but went to bed seemingly in usual health; towards morning she called her father to get her a drink of water, when it was brought she was dead. Before he left the house, a grown young man consulted him in reference to himself; upon exposing his breast he found that he was scarlet with the rash. In due time every member of the family were attacked with scarlet fever. A post mortem in the case of the little girl, revealed the fact that she died from scarlet fever.

Dr. B. continued, not long since I was called to see a little girl about four years old, she had a violent fever, breathed short and rapid, with some interruption and a slight cough. The nostrils were peculiarly expanded, indicating irritation or inflammation of the air passages; in short her symptoms resembled an acute case of bronchitis.

The symptoms became so urgent that he invited several physicians to see the case with him. Not one of them suspected the true cause of the sickness, until about the 10th or 11th day from the attack, when a purplish eruption began to make its appearance about the face and neck, which was shortly developed into a thorough rash as is usual in cases of this fever. Then the alarming symptoms subsided, and she made a good though slow recovery. There were two more children in the same family, one of them a new born infant, both escaped.

I am satisfied, Mr. President, we frequently lose cases of congestive scarlet fever, when the rash does not appear, and the cause of death is never known. I am at the present time attending a little boy who had a slight rash seven days before I saw him. The immediate cause of alarm was the induration that appeared under the left ear. At the expiration of three days I penetrated it deep with my lancet and a quantity of pus escaped; every few days abscesses formed in various parts of the body, and pus accumulated in them; in the short space of three days after,inflammation manifested itself. After the lad had been sick about one month purpura hemorrhagia appeared, and several of the incised abscesses bled freely, which were arrested by the stiptic application of ferri per sulphas applied by means of pledgets of lint to the bleeding surface.

He has now been sick nearly seven weeks, and has nine open abscesses besides others forming.

Scarlet fever has appeared in my practice under such a variety of circumstances, that I have often doubted its infectiousness. I have seen it prevail in rural districts, in families living as it were isolated, and several miles from any other habitation, and without any known exposure. Even when the members of the family had not been away from home in a month, nor had they received a visitor during that time.

When other cases appeared they usually occurred about the 14th day after the first.

I have frequently attended one case in a family when every other member was exposed but did not contract it. I have also attended other families when every one of their number had the fever.

I have concluded that persons living remote from habitations are as much exposed to scarlet fever, as persons being in crowded cities.

Four years ago, about Christmas, one of my children was taken with scarlet fever, while three other children escaped, although they were demonstrative in their affection for the sick one, kissing her repeatedly and sitting for hours by her bed-side; yet strange to say another case did not appear until twelve months more had transpired, when I had another case, to be followed by another at an interval of another year, before the third case appeared.

Those of my friends who knew the circumstances, were wondering whether my fourth child would contract the scarlet fever at the expiration of another year. Sure enough this really was the case. To say the least this was a singular coincidence.

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ART. III.—*Abstract of the Proceedings of the Buffalo Medical Association. April 2d,* 1872.

Meeting called to order by the President, DR. JOHNSON.

Members present: Drs. Miner, Samo, Daggett, Phelps, Strong, Cronyn, Bailey, Sloan, Diehl, Walsh, L. F. Harvey.

This being the Annual meeting the reports of the Secretary and Treasurer were read and accepted. The election of officers for the ensuing year resulted as follows:

President—Dr. John Cronyn.
Vice President—Dr. John Hauenstein.
Secretary—Dr. Leon F. Harvey.
Treasurer—Dr. B. H. Daggett.
Librarian—Dr. J. B. Samo.

DR. T. M. JOHNSON, the President, read the following valedictory address.

GENTLEMEN.—It is expected of me, as your retiring President, to address you on this occasion in accordance with an established custom of this Association. In fulfilling this obligation it is proper that we first consider the present condition of the Association and its history for the year just past. After which we beg leave to call your attention briefly to some thoughts on the sanitary condition of Buffalo.

The membership of our Association remains about the same as at the commencement of the year; the new members being about equal in number to the loss by death removals from the City and other causes.

There have been twelve regular meetings during the year, and one special meeting. But 'tis matter for regret that the attendance has been much less than it should have been. Much less than the interests of the Association, and the interests of the profession in our midst demands. A painful duty compels me to state that during the year we have lost one of our members by death, viz Dr. B. T. Whitney, who died on the 28th day of Jan. 1872 of Softening of the Brain. Within the year arrangements have been made with the Society of Natural Sciences by which the appearance and comfort of our place of meeting has been much improved and our expenses therefor reduced to about one half their amount heretofore. Our financial condition has been stated to you by our Treasurer. We sincerely hope that in the future the members of the profession in our City will take a more active interest in the Association and by their united efforts make it what it should be.

The subject of the sanitary condition of our City, has of late perhaps become somewhat hackneyed, and some, there undoubtedly are in our midst, who are ready to exclaim ; pray let us hear no more of filth and bad odors.

Still when we remember that during the last two or three years, all our newspapers have been nobly doing their utmost, our Common Council, listening to and discussing all the numerous plans brought to its notice, and the people of all classes clamoring for the abatement of a single nuisance, it is apparent that there is much that might and *ought*, to be said about our general Sanitary condition. The Hamburg canal alluded to above is such a stupendous nuisance as to make it a disgrace to any City in Christendom. There now seems to be a *possibility* that it will be abated within the present year. It is greatly to be desired that it be done at the earliest possible moment. This is desirable because it undoubtedly generates and intensifies disease in its vicinity, is a source of great danger to the general health of the City, and *also*, because it overshadows, and diverts the attention of the public, from other nuisances, other causes of disease and death, which although not so apparant to the general public, are really more deleterious to the health of our City than the Hamburg Canal of which so much has been said. There are within a not very wide extend of territory extending along either side of this same Canal, in a thickly, populated district, scores, yes, hundreds of privies with vaults, many of them at times overflowing and unconnected with any sewer or other adequate means of drainage. Pig-stys, stables, manure heaps, cellars containing water and decaying vegetable mater, cisterns and cess-pools, left from years end to years end, without proper disinfection to contaminate and poison the air, generate disease, and prepare the most inflammable fuel to feed and intensify the first epidemic that makes its appearance among us. This condition of things is not confined to the locality above mentioned, but exists in many other localities, and in some, perhaps to greater extent. This is especially the case in some of the German districts in the easterly portion of the City, where the combined effects of bad drainagel, filth, and a want of knowledge of, and in attention to, Hygienic laws are plainly seen in the prevalence of typhoid disease and the large presentage of child-death that occurs there. The sewerage of large sections of the City is defective and in many instances entirely inadequate. It has many times been proven in other cities, that defective or insufficient drainage is the direct cause of disease and death.

This hygienic law prevails here as elsewhere, and unless the remedy is applied our citizens must suffer the penalty. Another fruitful source of both physical and moral disease, with which the physician comes in daily contact, and of which the general public knows but little, and cannot therefore fully appreciate, is the tenament houses of which this city has its full complement. Unfortunately we have no statistics showing the number and population of these houses. Their number is undoubtedly greater than is generally supposed. In the construction of many of these buildings nearly all the requisites to the health and comfort of the occupants seem to have been dispensed with, and well known hygienic laws disregarded. Their surroundings in some instances are worse if possible than their construction and internal arrangement. Their Areas, Courts and Alleys, with defective drainage are the receptices of mud, garbage, filth, in short all the abominations that decaying animal and vegetable matter can produce. This material in abundance is left for days and weeks undisturbed by our health authorities to putrify and generate miasma that render them liable at any time to become the centres from which pestilence may extend in all directions.

The State Board of Health of Massachusetts is doing a noble work for the sanitary condition of that State. In the Anual report for 1871 just published, after commenting upon the reports of the causes of typhoid fever, made by the most eminent physicians residing in various cities and villages of that state, the board says. "The conditions and surroundings of typhoid fever in the period of its commencement are now more closely studied than ever before."

"The general result of this study, on the opinions of the Medical World, has been to encourage the belief, that in some way typhoid fever and filth stand in certain relations. There are differences of opinion, but out of this very widely diffused impression, have grown various hypotheses, based upon the propagation of typhoid fever by a poison as definite as that which causes vaccine disease, and all seeking to explain the nature of this poison and the manner of its introduction into the healthy human body. They may be thus divided."

First—Propagation by drinking water made foul by the decomposition of organic matter, whether animal or vegetable, and especially by the presence in such water of excrementitious matter discharged from the bodies of those suffering from typhoid fever.

Second—Propagation by air contaminated by any form of filth, and especially by privies, cesspools, pig-stys, manure heaps, rotten vegetables in cellars, leaking or obstructed drains.

Third—Emanations from the earth, occurring especially in the autumnal months and seasons of drouth.

How exactly these conditions correspond with the conditions in and around the tenament houses of which we have just spoken. The moral condition of many of the truly unfortunate occupants of these houses, is as bad as their physical condition. It is entirely unnecessary for the curious, the philanthropist or the good samaritan to go in imagination with Dickens through the alleys and byways of London to White Friars and Tom All-alones, to see abject poverty, misery, and vice, with all its loathsome surroundings. All these evils exist to a fearful extent in our midst, and within a few minutes walk of pallatial residences. The occupants of these modern palaces, and all of the better portion of our citizens owe it to their own safety, and the safety of those dear to them and depending upon them, to see to it, that in some way the condition of the unfortunate class heretofore alluded to be greatly ameliorated and improved. They ought to, and most of them do know the elevating, christianizing influence of the observance of hygienic laws, of healthful, and beautiful surroundings. They can and it is for their own interests to see to it, that proper health laws are made, and that the proper officers to execute these laws do their whole duty. The people and *ourselves,* have not done our whole duty in this matter.

Milk—Time will not permit us on this occasion to much more than allude to this subject of great sanitary importance. Within the last week with a member of this association who is now investigating this subject, we visited several of the stables in which the cows are kept that supply a part of the milk used in the city. We were much surprised on learning the number of stables and cows kept within the city limits, and much more surprised at the *manner* in which they are kept. Their natural and healthy condition, appears for the most part, to be entirely disregarded. They are crowded together in numbers varying from two to thirty, in dark, damp, and filthy stables, and deprived of adequate exercise, pure air, and pure water, for months, in some instances we are informed for years. Many of them are fed almost entirely upon still slop and when sufficiently supplied with this kind of food may yield a plentifully supply of milk. But it is well known to the initiated that it is so deficient in the proper essentials to good milk that it scarcely deserves the name of milk at all. Swill milk is not an inappropriate name for it. The gentlemen referred to in this connection informs us that the milk retailed to consumers is often adulterated with from twenty to twenty-five per cent. of water and contains only from three to six per cent. cream. Good country milk contains from fifteen to eighteen per cent of cream. Is it strange, that so many infants and children die of cholera infantum and kindred diseases, when dependent upon this food for sustenance. The venders of this fluid pursue the even tenor of their way with not the slightest interference by our health authorities We hope that the gentleman investigating this subject will in some manner publish his report for it is a subject of great interest.

Small Pox—It seems entirely unnecessary to say anything of the desirability of protecting every person from this loathsome disease. It is the duty of every person who does not know that himself and all in whom he is interested are protected to resort at once to vaccination, Yet we believe there are many amongst us that are not thus protected. It is to be feared that the mode of vaccination in some instances resorted to by our health authorities does not secure protection.

We were told a few days ago, by a teacher, a gentleman long connected with our public schools, that in one department of one of the schools, one hundred, being all the scholars in the department, were vaccinated and not one of them took the vaccine disease. From our own observation, and from what we learn from physicians and teachers, we are compelled to believe that vaccination as done in our public schools, is a failure, and a waste of the peoples money. We find no fault with the gentlemen who do these services. We believe them capable and faithful. The fault lies in the system adopted by our health authorities. There is need of stringent laws regulating this matter of vaccination.

It was our intention at the outset to ascertain and place before you if possible, the effects of the Hamburg Canal upon the health of people living in its vicinity. But on going to the health office for information on this subject, we soon found ourselves in the pursuit of knowledge under difficulties. The only records there that would at all aid in the investigation consist in copies of the certificates of cause of death given by physicians, undertakers, and coroners. The information to be thus gained was considered so unreliable, and attended with so much labor, that the project was abandoned. We were surprised and chagrined to find in the course of these investigations that the Board of Health had not made a printed annual report for the last ten years. Such a report, if properly made, would be valuable both to the profession and the public. Hoping that it may be of interest to members of the profession, the following condensed mortuary report for the year 1871 is placed before you.

The whole number of deaths reported to have occurred in the city during the year is 1635. In addition to these, 68 still born are reported. Of the whole number of deaths 892 were males and 734 were females. 1061 were reported as native born 548 foreign born and 26 unknown. 289 were of American parentage 1161 of foreign parentage and 185 parentage unknown. 428 are reported married 1120 single 87 unknown. 1544 died in the city at large and 91 in hospitals and other public institutions. From one hospital containing a daily average of about one hundred patients, no deaths are reported as occurring. The attending physician has reported two deaths during the year. Several other deaths have occurred there and have probably appeared in the reports, as in the city at large and cause unknown. This state of things is not the fault of the physician in charge. 86 died before attaining the age of thirty days. 155 died at the age of from one month to six months, 111 from 6 to 12 months, 224 from one year to three years. 81 from 3 to 5, and 39 from 5 to 10 years. The number of certificates of death given by physicians is 1118. By undertakers 366, by coroners 151. Consumption claims the largest number of decedents 205. Deaths from some of the other causes occurred as follows: Accidents 70, disease of the heart 58, cholera infantum 54, croup 84, inflammation of the brain 29, brain and meningies 30, inflammation of the lungs 84, typhoid fever 102, scarlet fever 34, puerperal fever 14, inflammation of the bowels 29, marasmus 20, diptheria 38, General dropsy 21, dropsy of the brain 15, of old age 42, from causes reported as unknown 317. Estimating the population at 125,000 which is nearly correct, the death rate for the year was one in 76.4 of the population or 13 in a thousand. Of the decedents, about 1 in 5 died before reaching the age of one year and 1 in 4 before the age of 5 years, 1 in 23 are reported as stillborn, 1 in 8 died of consumption, and 1 in 16 of typhoid fever. We could go much further into these particulars, but believe the reports too unreliable, to be of much if any value. Their unreliability is in some instances very apparant. We know at a glance that the number 68 does not probably represent more than one third the number of still-born. The number reported as dying from causes unknown is large, and as statistics, are of no value to us. This is to some extent the fault of physicians who do not always write certificates of cause of death. At no time during a residence of ten years have we seen the sanitary condition of this city, so bad as it is now, and at no period during that time, have we been more likely to suffer from epidemic diseases, than during the coming summer. There is great need of reform in the health department of our city government. This fact must be evident to any observing person who walks our filthy streets. It is the duty of every practitioner of medicine, among us to use his influence for reform in this matter.

In conclusion gentlemen. As physicians, we shall not fulfill our whole mission unless we use our best endeavors to *prevent disease* as well as to paliate and cure the sick.

Dr. Miner—The paper just read is an important one, and we have all been very much interested in it. The Doctor says the city is in a worse condition than ever before, but has there been time to get the streets cleaned up earlier? The out houses are no worse than ever, always bad enough. He is justified in saying some hard thing about the Hamburg canal, but I think the Doctor cannot show that it has been the direct cause of disease, there has been no case in its vicinity that has not occurred in other parts of the city. I think I am safe in saying this. The canal has not been spoken of too highly as a nuisance or a disgrace. The paper will and should attract much attention. Our sanitary condition should be understood, if not abated. It is astonishing, how impossible it is to get proper drainage in our best streets. The houses may look well on the outside but there is not, and cannot be health inside with improper drainage. In the warm season in Buffalo, there is hardly a neighbourhood where on the house tops, effluvia from the out houses may not be observed.

Dr. Strong—There is a wide field for observation in the paper just read. We should as a society look to the sanitary condition of the city, there should be an annual report made by the Health Physician treating on this subject. Every medical man feels the need of it, and I would therefore move that a committee be appointed to confer with the proper authorities on the importance of publishing such a report.

Motion carried.

The President appointed as such committe Drs. Strong, Rochester and Miner.

Dr. Johnson—There has been no annual report of the Health Physician for eight or ten years. Smaller cities than ours have good reports presented every year.

Dr. Daggett—I was ill at the time of my appointment to the office of Health Physician, and was some time before I could get fairly at work. Found the mortuary law of the city defective. Visited the different cemeteries in our city, and after thorough study of the subject in all its bearings, succeeded with great difficulty in getting a revision of the City Ordinances. Received no encouragement to do anything. Physicians are very careless in giving death certificates. Undertakers said frequently they could not get certificates. Physicians are liable to a fine if called upon for one and refuse to give it.

The appointment of Health Physician being every year, it is difficult for one holding the office for so short a time, to do justice to it, for just as he becomes conversant with its duties, he steps out to let another learn them. While in office found it very difficult to enforce the law.

Dr. Johnson—If the Hamburg canal is not now detrimental to health, it will be in the summer or in case of an epidemic.

The nuisances in other parts of the city are worse than ever. In the vicinity of William street the city has built up very rapidly and there is no drainage there. It will be hard to resist an epidemic there. Do not think that people think enough of drainage.

Dr. Cronyn said that the subject of cerebro-spinal meningitis had been mentioned and deferred, Dr. Miner had come in and would have something to say upon the subject.

Dr. Miner said he had little to add to what he had attempted to say in the last Journal concerning this malady. Every day he had seen new cases and believed the disease on the increase. It commenced with children, but adults are now frequent victims, though it is still mostly confined to children and young people. Its appearance in Buffalo opens up a wide field for professional labor and also professional research and study. At present we cannot be supposed to possess a great amount of independent knowledge, but must trust to the observations of others for our views of the nature of the disease. It would seem that we are justified in saying, that it is epidemic, *not contagious.* This question is asked constantly and is to be answered positively. Its causes we do not understand. They are supposed to be atmospheric and wide spread, but of this, and the nature of this influence we know nothing. The symptoms and appearences are now sufficiently familiar to all physicians. The proportion of deaths to cases could not yet be determined. but it seems probable that a large majority recover. *Treatment* was to us the most important subject. Opium and Quinine he thought proper, the opium in many cases indispensable. He had used chloral to obtain sleep, and liked its effects, cases recovered under all plans of medication, suggesting to the observing practitioner that like many other diseases it might have self limited nature, and that the final result might not be greatly influenced by drugs; that they are useful mainly in the *care* of patients. Many remedies had been, and would continue to be tried; care is required to determin their real value.

Dr. Strong—Have seen very little of this affection since my return to the city, only three or four cases, two children, in the same family, one died, in the fatal case there was not marked delerium, much pain, rigidity of the muscles of the neck, no coma, last five or six hours might have been comatose. Am now treating a lady æt 35 taken Saturday with chill, prostration to fainting, pain in head and back for thirty six hours, after that the chief pain seemed to be in the lower extremetics, rigidity of the muscles of the neck no coma, no delerium, the pain was very severe, the patient said that it seemed as if her legs would burst, the friends said that on the first day there were spots on the body. Gave opium very freely the first forty eight hours ¾ gr. to 1 gr. also used the bromide of potassium, mustard on the neck, gave stimulants. The patient is now apparently out of danger. Have the impression that coma and delerium is not common, would ask the views of the gentlemen present. Do not think that spots are characteristic.

Dr. Miner—Delerium must be a common symptom of the disease, patients are frequently insensible to every thing.

Dr. Cronyn moved that this disease be made the subject for discussion at the next meeting. Carried.

Dr. Cronyn—I think that the delerium has arisen from the pain in most of the cases I have seen, there is a tetanic condition of the muscles, opisthotonos. Adjourned.

Leon F. Harvey, Secretary.

ART. V.—*On tho recent Advances in the Theory of Vision.* By H. HELMHOLTZ, (*of the Royal Society of London.*)

Translated from *Les Annales d' Oculistique*, BY F. W. ABBOTT, M. D.

(*Continued.*)

Physics demonstrates that light is an oscillatory motion of an elastic medium, called the *luminiferous ether*, extending throughout space, whose vibrations are diffused in the form of waves; it is a motion analogous to that of the circular waves which are formed upon the surface of still water into which a stone has just fallen; we may also compare this motion to the disturbance which sound makes in diffusing itself in our atmosphere. But the propogation of light and the oscillations of the particles set in motion by the luminous waves take place with a velocity incomparably superior to those of the water and the air in the examples which I have just cited.

The systems of luminous waves which emanate from the sun differ considerably among themselves in their dimensions, just as upon the water the waves form sometimes little ripples a few inches long, sometimes immense billows whose summits embrace abysses from sixty to a hundred feet in width. Now, just as the waves of a liquid surface, whether they are high or low, short or long, do not differ among themselves in nature, but only in size, so also, the systems of luminous waves which emanate from the sun differ in force, and length of wave, but all execute analogous motions. All present the same remarkable physical properties, reflection, refraction, interference, diffraction, and polarization, and this analogy, which subsists in spite of certain differences attributable to the difference of wave-lengths, enables us to affirm that in all these systems of waves, the vibratory motion of the luminiferous ether is of the same kind. We remark particularly that the phenomena of interference, where the light reinforces or destroys itself when we join to it light of the same kind which has run a longer or a shorter course, prove that all these luminous emissions consist in an oscillating undulatory motion; we remark also the phenomena of polarization which, varying with the side whence they are observed, enable us to affirm that the oscillations of the particles of ether are perpendicular to the direction in which the ray is propagated.

All the different rays of which we have just spoken have this in common; to warm the terrestial bodies which they strike, and to produce a sensation of heat upon our skin.

But our eye, on the contrary, perceives as light only a part of these vibrations of the ether. It is not effected by the systems which present great lengths of wave, and which we may compare to the long billows of the ocean; so they receive the designation of *invisible calorific rays.** These are rays of the kind which a stove emits when it warms us without being heated to redness.

On the other hand our eye perceives so feebly the rays of short wave-length, comparable to the ripples produced by a light wind upon the surface of a pond, that these rays also are generally considered invisible, and so they have been called *invisible chemical rays.*

Between the waves of the ether which are too short and those which are too long, there are some of a mean length which strongly effect our eye without differing essentially from the invisible heat rays and the invisible chemical rays. They are only distinguished by the different value of their wave-lengths, and by the physical relations resulting therefrom. We give them the name of *light,* for the reason that they alone affect our retina.

When we take into consideration the calorific quality of these rays, we designate them also under the name of *luminous heat*, and as they produce upon our skin a sensation entirely different from that which they produce in the eye, heat was considered, until thirty years ago, as proceeding from a radiation of an entirely different nature from light. But, as has been demonstrated by researches made since with the greatest care by physicists, light and heat are identical, and it is impossible to separate them in the luminous rays of the sun. Whatever may be the optical operations which they are made to undergo, it is impossible to diminish the luminous power of the rays without lessening at the same time and in the same degree their calorific and chemical effects. Every operation which suppresses the oscillatory motions of the ether suppresses naturally, also, all the effects of these motions, that is to say, light, heat, chemical action, the excitation of flourescence, etc.

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* [Though the term is by no means faultless, those rays both ultra-red and ultra violet, which are incompetent to excite vision are called *invisible rays*. In strictness we cannot speak of rays being either visible or invisible; it is not the rays themselves, but the objects which they illuminate which become visible. Tyndall. Notes on light. No. 249.]

Those vibrations of the ether which strongly affect our eyes, and which we call light, excite in us the impression of different colors, according to the difference of their wave-lengths. The vibrations which present a great wave-length appear to us as *red*, then come successively the colors *orange, yellow, green, blue, indigo* and *violet*, this last color corresponding to the least wave-length capable of producing a luminous impression. This succession of colors is well known: it constitutes the rain-bow; we see it likewise when we look at a light through a glass prism, and it is the same series of colors which forms the colored fires of the diamond. In fact, in transparent bodies light is analyzed owing to the difference in the wave-lengths of the different colors, which produces a difference of refraction, whose effect is to isolate these colors one from another. These simple colors, which we obtain in the greatest purity in projecting, by the aid of a glass prism, the spectrum of a line of solar light, are at the same time the most brilliant and the most saturated that are to be seen.

The mixture of several of these simple colors give the impression of a new color, generally more or less whitened. We obtain the impression of white when all are mixed exactly according to the proportion which they present in solar light. In the mixtures, according as the rays which predominate are of great, medium, or small wave-length, the color obtained is of a reddish, greenish, or bluish white. In suffices to have seen a painter work to know that the mixture of two colors gives a third. In spite of the numerous differences of detail between the results of the mixture of colored rays and those of the mixture of the colors for the painter, the phenomena occur upon the whole, in an analogous manner in both cases. Whether it be upon a part of our retina, or upon a white screen, that we superimpose rays of two different colors at once, in one case as in the other, in the place of two colors we see only one, and this *resulting color* differs always more or less from the two colors which enter into its composition.

The most striking difference between the mixture of colors for the painter and the mixture of colored rays, consists in this, that painters obtain green by the mixture of blue and yellow, while the mixture of yellow and blue light gives white.

So, in general, different mixtures awaken in us the sensation of different colors. But the number of perceptible colored differences is much less than that of the different mixtures of luminous rays which the external world may send to our eye. For the retina, the mixtures of scarlet and greenish blue rays, greenish yellow and violet, yellow and ultra-marine blue, red, green and violet, or finally of all the colors of the spectrum; all produce the same sensation of white. Physically, these mixtures are, nevertheless, very different; and *we are not even able to demonstrate any kind of physical resemblance between these different mixtures* if it is not the identity of their action upon the eye. Thus, for example, a surface illuminated with red and with greenish blue will become black in a photograph, while another illuminated with yellowish green and violet will become very light [*claire*] although both surfaces are alike white to the eye. Moreover, if we successively illuminate colored bodies by the aid of these different white lights, their coloring will appear different each time. Finally it suffices to look at these different lights through a prism or a colored glass to recognize them as different.

As is the case with white light so we may, by using very different mixtures of colored light, reproduce other colors, especially when they are not extremely saturated; the resulting colors thus obtained may be identical to the eye, whatever may be the difference of their composition, and, consequently, that of their physical or chemical properties.

We are indebted to Newton for a process which enables to represent in a very simple manner, the system of colors of which the eye can appreciate the difference, and by the aid of which the law of the mixture of colors is expressed in a relatively simple manner. Let us imagine the colors of the spectrum suitably arranged around the circumference of a circle, commencing with the red and following the series of the colors of the rainbow by insensible shadings to the violet; we unite the red and the violet by a purple, passing on the one hand into the blueish violet and on the other into the yellowish scarlet of the spectrum. We put white in the centre of the circle, and upon the radii which go from the centre to the periphery, we dispose by insensible gradations the colors which may be produced by the mixture of white with the saturated peripheral colors. The chromatic circle thus constructed represents all the variations which the colors can present, the intensity moreover remaining equal.

Now—this can be demonstrated—if we properly arrange the colors upon such a table, and if we properly choose the measure of their intensities, it suffices to construct the centre of gravity to find the position of the color which results from the mixture of two colors of the table. The construction is made by replacing the weights by the luminous intensities. Thus, upon the chromatic table properly constructed, all the resulting colors which two colors can make are situated upon the straight line which unites these two colors, and these resulting colors are by so much nearer one of these composing colors as they contain more of this one and less of the other·

I remark that, in such a disposition, the colors of the spectrum. which, being the most saturated which exist, ought to be placed the farthest possible from the white, that is to say, upon the circumference of the table, do not adjust themselves exactly in a circle. The circumference of the figure presents three projections, in the red, the green, and the blue, so that the whole very nearly resembles a triangle with rounded corners. While the red, the green, and the blue occupy the angles, the sides of the triangle contain the transitions from the red to the green through the yellow, from the green to the indigo through the greenish blue, and from the indigo to the red through the violet and purple.

With his representation of the system of colors, analogous to that which we have just described, Newton had no other object than to give a comprehensive idea of the complicated facts relative to our subject. Very recently, Maxwell has been able to demonstrate, even from a quantitative point of view, the accuracy of the propositions comprised in this representation. He accomplished this by means of discs whose different sectors bear different colors, the mingling of which is effected by means of a rapid rotation. When one of these discs turns so swiftly that the eye can no longer follow the different sectors, the colors of these sectors blend into one uniform resulting color, and the quantity of the light relative to each one of the colors may be measured directly by the size of the sector which it covers. Now we may demonstrate experimentally that the resulting colors thus obtained are identical with those which the simultaneous illumination of the same surface with the same colors would give. It is thus that measure has been able to penetrate into the study of colors, which appeared inaccessible to it, and the qualitative differences of colors have been brought into the domain of quantitative circumstances.

We see that all the differences of colors become reduced to three; those of *tone*, *saturation*, and *intensity*. The differences of *tone* are those which exist between the different colors of the spectrum, and which we designate by the names of red, yellow, green, blue, violet and purple, so, relatively to tone, the colors form a continuous series, such as we obtain in uniting by purple the extreme colors of the rainbow, and such as we have represented upon the circumference of the chromatic table. *Saturation* presents its maximum in the simple colors of the spectrum at least in so much as the sensations produced solely by external light are in question; we shall see farther on that in sensation saturation may attain a still higher degree. Every addition of white to the spectrum colors diminishes their saturation. It is thus that rose is identical with whitened purple, flesh color with whitened scarlet; the pale green, pale yellow, pale blue, etc., are the same colors little saturated, or mingled with white. All the composite colors are, as a general rule, less saturated than the simple colors of the spectrum. Finally, the differences of *brightness* or *intensity* have not been represented upon the chromatic table. Only so long as we consider colored light, do these differences of intensity present a quantitative character. Black is then only darkness or simply the absence of light. It is otherwise when we look at colored objects; black then corresponds as well as white to a manner of reflecting light, and for this reason, in ordinary language, it is considered a color as well as white. There also exists a series of denominations for the colors of feeble intensity. We call them dark or deep, or sombre [foncées] when they are saturated, and *grayish* [*grises*] when they are whitened. Thus the *dark blue* is a blue of feeble intensity and saturated; *grayish blue* is a blue of feeble intensity and whitened. For certain colors the employment of special names affords greater brevity.

Thus reddish brown, brown, olive green are feeble gradations, more or less saturated of red, yellow and green.

We have just seen how, in relation to sensation, the objective differences in the composition of light may all be reduced to differences of *tone, saturation* and *intensity*, and how language conforms itself to this distinction. We may express this triple difference in still another manner.

I have said before that the chromatic table properly constructed resembles a triangle, let us suppose for an instant that it forms a rectilinear triangle; we will consider later the error which this supposition involves. We agree with Maxwell that red, green, and ultramarine occupy its angles. It follows, from the law of the mixture given above, that all the colors of the interior and of the sides of the triangle may be obtained by the mixture of the three colors which occupy the angles. Thus *all the differences of the colors correspond to different mixtures of three fundamental colors.* It is best to take for fundamental colors those indicated by Maxwell. It would be a bad choice to take, with the ancient authors, yellow and blue which have been chosen as fundamental colors from the mixtures of colors for painting, in fact, the yellow and blue rays do not give green by their mixture.

The peculiarities of this method of reducing all the varieties of light to the mixtures of three fundamental colors becomes more clear by comparing it with what occurs in an analagous manner in the ear.

We know that sound, as well as light, is an oscillatory movement whose vibrations are diffused in the form of waves, in like manner as with light, we have to distinguish in sound systems of waves of different wave-lengths, which excite in our ear impressions of diverse qualities; the waves of great length produce low sounds, those of short length high sounds. Like the eye the ear may be struck at the same time by several systems of waves, that is to say, by several sounds. But in the ear these sounds do not mingle in the same way as colors, whose simultaneous sensations produce colors which we have called resulting. We cannot replace the simultaneous action of *do* and *mi* by another sound like *re*, without completely changing the impression; while the eye does not notice the substitution of orange in the place of a mixture of red and yellow. The most complicated harmony of an orchestra would produce in us a different sensation, should we replace one of the sounds which compose it with one or two others. For a cultivated ear, there exists no harmony which is just exactly like another composed of other sounds. If the ear behaved in relation to sounds as the eye in relation to colors, it would be possible to replace any harmony, whatever it might be, by the combination of three simple sounds, one very low, the second of medium pitch, and the third very high. It would be sufficient to vary the relative intensity of these three sounds and all music could be reduced to the combinations of three sounds.

We find, on the contrary, that a harmony remains invariable to the ear only so long as the intensity of each one of the sounds of which it is composed remains the same. To define a harmony with perfect accuracy it would be necessary, therefore, to determine exactly the intensity of all the sounds of which it is composed. So also, the physical nature of a kind of light can be completely determined only by measuring the intensity by all the simple colors which this light contains. Now, the light of the sun, of the greater part of the stars, and of flames contain an immense number of different colors which shade into each other by insensible gradations. To define such light exactly, from a physical point of view, it would be necessary, therefore, to measure the intensity of innumerable elements, while in sensation we only distinguish the variation in the intensity of the elements.

The skilled musician is able to hear immediately in a harmony the note produced by each instrument of a complete orchestra. The physicist cannot recognize immediately, by simple sight, the composition of a light, he is obliged to have recourse to a prism, which decomposes the light. But then the composition of the light becomes manifest, and we may recognize the light of the different fixed stars, from the bright and dark lines of their spectrum ; we recognize equally the chemical elements which are contained in terrestrial flames, the burning atmosphere of the sun, of the fixed stars, and the nebulæ. Spectrum analysis, the most brilliant discovery of modern times, which has rendered the most remote regions of the sky accessible to chemical analysis, rests solely upon the fact that the light from each luminous source contains certain ineffaceable physical peculiarities which it preserves even in mixtures.

It is very interesting to know that there are some eyes which reduce the differences of the colors to a still more simple system, that of the mixture of only two fundamental colors. We say that these eyes, which are very frequently encountered, are affected with Daltonism, or better still *color blindness,* because they confound colors which appear very different to ordinary eyes. These eyes are not less apt in distinguishing the other colors, perhaps even a little more accurately, than normal eyes. Generally these eyes are affected with *anerythropsy* (*no-red-seeing*), that is to say, in their system of colors it is the red that is lacking, and, consequently, all the variations which the addition of red gives to the other colors. All the differences of color appear differences of blue and of green, to which they give the name of yellow. Thus scarlet, bright red, pale and greenish blue appear the same to them, or at most present only differences in intensity. So also purple, violet, and blue appear the same to them, likewise red, orange, yellow and green. The scarlet flowers of the geranium appear to them of the same tone as its leaves; they cannot distinguish between the red and the green lanterns which are used for signals upon railroads; they do not see the red extremity of the spectrum; very saturated scarlet appears almost black to them, to such a degree that a Scotch priest, suffering from color blindness, by mistake had a cassock made of scarlet cloth.

We encounter, in the perception of colors, some curious inequalities in the expanse of the retina. Firstly, every one is blind to red near the limit of the field of vision. If we move a geranium flower to and fro near the border of the visual field, we see its motion, but we do not distinguish its color which is confounded with that of the foliage of the plant, for generally, in indirect vision red appears much darker.

In the second place, we have seen that around the fovea centralis the retina is of a yellow tint, it follows from this that blue appears a little darker in the centre of the field of vision. This is especially striking in mixtures of red and blueish green. When such a mixture appears white to direct vision, it appears blue in the peripheral parts of the visual field; inversely, when these mixtures appear red to direct vision they appear white as soon as they recede from the point of fixation.

By a process which I have noticed in a preceding chapter, these irregularities pass unpercieved owing to the constant motion of the eye. With regard to the pale and whitened colors which the external world ordinarily presents to us, we know to what impressions of direct vision the impressions received indirectly correspond, and we interpret the latter so as always to appreciate the colors in the way in which they are presented to direct vision. Unusual colored mixtures, or especial attention is necessary for the difference to become appreciable.

To be Continued.

Correspondence.

To the Editor of the Buffalo Medical Journal:

Seeing Cerebro-Spinal Meningitis figuring conspicuously in the March number of the Journal. I send you the report of a case which I saw on Easter Sunday.

The patient A. G. I. was in his usual good health on Friday, on Saturday he complained of headache and sick stomach, when his mother gave him a full dose of Cathartic Pills. Nothing very unusual occurred except that free vomiting accompanied the action of the cathartic.

About 10 A. M. on Sunday he complained of numbness in his legs, and told his mother he saw her double. Before 12 he was totally insensible when a well known Physician living in the same Village, was at once sent for, was promptly on hand, and immediately foretold a fatal result.

About 4 30 P. M. I saw the case and found the following symptoms. The pulse, soft, full and very little quickened. The skin cool, but not dry, the pupils dilated unequally, the left most, the mouth nearly closed, lips slightly parted, and covered with clammy mucus, constant motion and clutching of the left arm and hand to the head, no motion, and apparently no sensation in the lower extremetics. While agreeing with the attending physician in his prognosis, we both hoped that there would be time to do something, as the lad was healthy, vigorous, and only 17 years of age. *But, he died at 2 o'clock A. M. on Monday,* his sickness lasting about 14 hours. Cold to the head and a blister, cups with simple mustard Caltplams, Linaments of red pepper and ammonia with turpentine enemeta, and I believe a couple of doses of Iod. and Bromide of potassa were used, yet the result was as I have told you, death in 14 hours. On my way home next day I came to this conclusion that if I ever saw another such case (and I hope I wont) that I shall put the patient in a hot mustard bath, use the cold douche to the head, and whatever other means I can obtain to excite action to the surface, this case clearly convincing me that if the great nervous centres are not relieved at once, by some artificial means you have not time given to depend on the therapeutical action of drugs.

I am, sir, your obedient servant,

YORK, ONT., April 2nd, 1872. R. H. D.

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Editorial Department.

Cerebro-Spinal Meningitis or "Spotted Fever."

ANSWER TO CORRESPONDENTS.

The epidemic of cerebro-spinal meningitis which was spoken of in our last journal, as having recently visited Buffalo for the first time, continues to prevail with unabated frequency; the health officer's report for March, shows thirty two deaths from this disease alone. As we have already said, we are unable to throw any great light upon the nature or causes of this disease, but we would faithfully record the facts and circumstances of its appearance, and direct attention to the importance of studying the conditions and surroundings of all cases as they appear, thus hoping to finally gain some better and more satisfactory knowledge of its nature, causes and modes of cure. With this view we have noted the general hygienic conditions in the forty cases which have already fallen under our own care, or been seen in connection with our professional friends. These furnish representative cases of the disease as described by all authors, some mild in character and terminating favorably, others of active or malignant form and terminating fatally. It is impossible to determine at present, the proportion of deaths to cases, our own statistics show nothing, on this point, being called to see many of the cases because severe and certain to end fatally. It seems probable that the death rate is not so great as has generally been estimated in most other places where it has prevailed epidemically. Of the forty cases twelve are now known to have ended fatally, and of the remaining, others are likely to also end fatally, however, taking away the cases seen in consultation, mainly on account of their severity, and the proportion would be lessened nearly one half.

We are asked, is it contagious? For ourselves we answer no, and we believe the profession with remarkable unanimity, have regarded it as non-communicable by the sick to the well. Its prevalence in the French garrisons and barracks without extending to the civil population, and some other isolated facts giving the appearance of its extending by contagion led a few physicians to suppose it "infectious" or contagions, but we believe that their views were not sustained by subsequent observation, and that it may safely be regarded as settled, that it is not contagious. Again, we are asked, is it malarious? or does it arise from sewers and other sources of atmospheric contamination? In Buffalo, its rise and progress are connected, so far as can be known, with no animal or vegetable putrifaction, nor with any miasmatic or other deleterious or offensive emanations. It has made its appearance in the hovels of the poor and palaces of the rich; it has been about equally fatal when seen in the most salubrious and best ventillated apartments as when occurring in places destitute of all healthy surroundings. We cannot answer this question better than by quoting from the excellent work of Stille, upon Epidemic meningitis which we would recommend to all who desire to study this disease. Speaking of the causes he says: "It may be said in general terms that epidemic meningitis has occurred in all portions of the temperate zone, inhabited by European races and their decendants, in all sorts of localities, among all ranks and conditions of society, at all ages, and in both sexes, and that it is therefore in the strongest sense of the word a pandemic disease. And, when it is added that the disease is not disseminated by contagion, it evidently falls in to the category of the diseases referred to, of whose occurrence no other explanation is at present possible than that they are directly produced by a specific atmospheric poison."

Does it resemble typhus fever, and is it a new phase of that disease? Every experienced physician when he meets his first case, though he may not recognize its true nature, will at once see that he has a group of remarkable symptoms and that it is something he has never before seen; he will soon decide upon its true character by exclusion, rejecting every other form of disease, he will soon arrive at the true nature of the malady. The cases do not resemble anything we have ever before seen, the symptoms, appearance of patient, and history of attack, are quite unlike that present in any other disease. Still, there are some resemblances to other low forms of disease, and some physicians liken it to typhus. We cannot better point out the wide distinction, than by quoting a tabular summary made by Stille.

EPIDEMIC MENINGITIS.	TYPHUS FEVER.
A *pandemic* disease. Occurs in places remote from one another, and without intercommunication.	Essentially an *endemic* disease. Always due to local causes. Spreads by intercommunication only.
Attacks all classes of society. Is never primarily developed by squalor and deficient ventilation.	Attacks primarily the poor, filthy, and crowded, alone.
Is not contagious.	Contagious in a high degree.
More males than females attacked.	The two sexes are equally affected.
More young persons than adults.	More adults than young persons.
Generally occurs in winter.	Epidemics are irrespective of season.
Eruptions are wanting in at least half of the cases; they occur within the first day or two.	The eruption is rarely absent, and appears between the fourth and the seventh day.
The eruptions are very various, including erythema, roseola, urticaria, herpes, &c. Ecchymoses are common.	The eruption is uniformly roseolous and then petechial. Ecchymoses are rare.
Headache acute, agonizing, tensive.	Headache dull and heavy.
Delirium often absent; often hysterical, sometimes vivacious, sometimes maniacal. Generally begins on the first or second day.	Rarely absent; usually muttering. Rarely begins before the end of the first week.
Pulse very often not above the natural standard; often preternaturally frequent or infrequent. Is subject to sudden and great variations.	A slow pulse exceedingly rare. Its rate is pretty constantly between 90 and 120.
"The temperature is lower than that recorded in any other typhoid or inflammatory disease." It is also very fluctuating.	The temperature is always more or less elevated, and it does not fall until the close of the disease. "The skin is hot, burning, and pungent to the feel."
The body has no peculiar smell.	The mouse-like odor of typhus is characteristic.
The tongue is generally moist and soft; sordes of the teeth, &c. is rare.	The tongue is generally dry, hard and brown; and the teeth and gums fuliginous.
Vomiting, generally of billious matter, is an almost constant and urgent symptom, especially in the first stage.	Vomiting is rare, and not urgent.
Pains in the spine and limbs of a sharp and lancinating character are usual, and evidently neuralgic.	Pains are dull, heavy, and apparently muscular.
Tetanic spasms in a very large proportion of cases and within the first two or three days. They are due to an inflammatory exudation within the spinal canal.	Tetanic spasms are unknown in typhus. Convulsions sometimes occur, due to "pyæmia."
Cutaneous hyperæsthesia is a prominent symptom.	The sensibility of the skin is generally blunted.
Strabismus common.	Rare.
The eye, if injected, has a light red or pinkish color.	The blood in the conjunctival vessels has a dark hue.
The pupils are often unequal.	Always equal.
Deafness often complete and permanent.	Hardly ever permanent, or attended with signs of disorganization of the ear.
Duration very indefinite; but generally from four to seven days.	Duration from twelve to fourteen days.
Relapses are common.	Relapses are rare.
The blood is often highly fibrinous.	The blood is never fibrinous.
The lesions, unless in the most rapid cases, consist of a fibrinous or purulent exudation in the meshes of the cerebro-spinal pia mater.	There are no inflammatory lesions whatever.
Mortality from 20 to 75 per cent.	Mortality from 8 to 40 per cent.

Our space prevents our answering but one other question asked by those who have not yet seen, but every day expect to meet the disease. What *treatment* do you find most satisfactory? The following suggestions copied from an essay by J. Netten Radcliffe published in a work upon diseases of the spine and nerves, will furnish in brief as satisfactory answer as can be given.

"*Prophylactic.*—Ignorance of the true etiology of the disease limits our preventive efforts to general sanitary measures, applicable to all epidemic diseases, for the purification of houses and localities. Mr. J. Simon, recording the conditions under which the disease has prevailed, writes: "I am strongly of opinion that the best sanitary precaution which in the present state of knowledge can be taken against the disease, must consist in care for the ventilation of dwellings". He adds, however, "that in some cases, according to local reports, the distribution of an epidemic has very decidedly not been governed by conditions of overcrowding and ill-ventilation." Dr. B. W. Richardson's suggestion as to the cause of the disease should lead to the careful microscopic examination of all bread stuffs and farinaceous preparations in use among families and communities where the disease breaks out, and the disuse of such as may be of doubtful character.*

Curative.—The treatment of epidemic cerebro-spinal meningitis is as unsatisfactory as that of cholera. The evidence of the course of the disease having been beneficially affected in any outbreak by the administration of medicine is very doubtful. The too common rapid progress of the malady to death, as in cholera, and the nature of the lesions determining death, necessarily set at naught efforts to control it; medicine not being guilty either of inaptitude or inactivity. The control of this disease, as of cholera or trichiniasis, is a question of preventive rather than curative treatment, and must depend upon the discovery and limitation of its cause. In the earlier outbreaks, epidemic cerebro-spinal meningitis was treated as an acute inflammatory affection, by bleeding and purgatives, with the general result that the fatality of the malady was probably invariably augmented. During the recent outbreak in Philadelphia, it was found that, in the more asthenic cases, cupping the nape of the neck was "of essential service in mitigating, and generally, indeed, in wholly removing the neuralgic pains which form so prominent and so severe a symptom in many cases of the disease" (STILLE). When the state of the patient forbade the abstraction of blood, dry-cupping used in the same locality afforded signal relief, and rendered the effects of vesication more prompt and complete. This was the experience of one of the least fatal outbreaks recorded. The experience of the majority of epidemics has been against any bloodletting, local or general. The deduction to be derived as to depletion from the general state of the circulation and the results of practice entirely coincide. For, as a rule, the pulse from the very outset contraindicates the withdrawal of blood; and, if in any case it should seem from the general symptoms that depletion might exercise some control over the central mischief, a thoughtful regard should be given to the future. The application of *cold* to the head and spine, either by means of ice or a freezing mixture, in Esmarch's India-rubber bags, is not open to the same objection as bloodletting, and has furnished by far the most satisfactory results of all direct treatment of the acute cerebro-spinal symptoms. In its use care should be taken not to prolong the application so as to depress or increase the depression already existing of the whole system. When the acute nervous symptoms are accompanied by marked prostration, it is advisable during the application of the ice to swathe the limbs in hot flannels, pack the legs and thighs with hot-water bottles, or bags filled with hot sand or salt, and cover the abdomen with thick layers of flannel or cotton-wool. From the very outset of the disease, care should be taken to economize the temperature of the body, and anticipate its fall; and in cases characterized by collapse, or much vital depression, the application of external heat in the manner just suggested is a cardinal point of treatment. Of medicaments directly addressed to the nervous symptoms, *opium* is the most valuable. It is especially indicated when there is much restless and delirium, sleeplessness, hyperæsthesia, and painful spasm. *Morphia* is the best form of administration, and subcutaneous injection perhaps the best mode. The drug should be given in decided and frequently repeated doses, and carefully watched. Stille says of its use during the recent outbreak in Philadelphia: "We were in the habit of giving one grain of opium every hour, in very severe, and every two hours in moderately severe cases, and in no instance was produced either narcotism, or even an approach to that condition. Under the influence of the medicine the pain and spasm subsided, the skin grew warmer, and the pulse fuller, and the entire condition of the patient more hopeful. It seemed probable, however, that the full benefit of the opium treatment could be received by those only who were subjected to it in the early stages of the attack. Direct experience is here in pefect accord with the expectation which a knowledge of the pathological processes involved in the disease would naturally suggest."

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* *Diseased grain.*—Dr. B. W. Richardson has suggested that epidemic cerebro-spinal meningitis may possibly arise from the consumption of diseased grain, after the manner of ergotism, and perhaps acrodynia. He thinks that the probabilities are altogether in favour of the suggestion, that "the cause, in fact, is a diseased grain, or fungus, contained in some kinds of flour out of which the bread-stuffs are made. This fungus may not be present in large quantities, and many persons may eat of the food without getting a poisonous part; but one will get it out of a number, and this without any communication beyond the breaking of bread together: this disease may occur in one member of a family, leaving the rest free, and in this irregular way it may be distributed, in an epidemic form, over a large surface of the country." He adds, "If my hypothesis, as regards cause, be correct, there is little danger of the disorder extending widely in this country; for of our cereals used as food, nearly the whole of the population now select wheat, and our wheat generally is selected for the market with great judgement and circumspection. Any cases, therefore, that might occur would be isolated, and would be easily traced out and prevented." This suggestion opens out an altogether new field of inquiry respecting the origin of the disease, and it demands active and thoughtful consideration in subsequent outbreaks. Dr. H. Day, of Stafford, has endeavoured, by experiments on the lower animals, to obtain some light on the subject. He fed three rabbits with unsound grain (wheat, oats, ergot of rye, and mouldy bread) with this result: In all the animals a spasmodic affection was produced, and in two inflammatory changes in the right eye, proceeding in one case to ulceration of the cornea, and evacuation of the contents of the globe One of the rabbits died on the eighth day, the other two were killed on the twelfth day, and in all more or less congestion of the membrances of the spinal cord was found on dissection.

The sum of our knowledge of the etiology of epidemic cerebro-spinal meningitis is this; that the clue to its explanation has not been discovered.

A Committee of the American Medical Association has reported favorably of the *sulphate of quinia* in large doses, given at the very beginning of the disease. In some instances the drug seemed to abort the attack. The committee speaks also of the favourable results reported from the combined use of *ergot* and *chloride of iron.* Some American physicians have given *ergot* in combination with *belladonna*, and *belladonna* in combination with *quinine*, but with equivocal benefit. *Mercurials* have been freely used, particularly in the form of *calomel*, but their effect has been most questionable, except as purgatives. Their indiscriminate use is to be utterly condemned, and their use at all to be discountenanced. A host of other medicaments have been made use of, of which it is requisite to note only *iodide of potassium*, *bromide of potassium*, and *arsenite of potash.* The circumstances under which the two former drugs have been used, and are most likely to prove beneficial, will suggest themselves to the practitioner. It does not appear that any decided good has arisen from their administration. In protracted cases of convalescence the arsenite of potash may prove a valuable remedy.

Of the general treatment of the patient the hot bath [102°–103°] is, when practicable, the most important. This should be followed, as recommended by the Committee of the American Medical Association, by friction with warm oil of turpentine. The *regimen* should be generous and nutritious from the beginning of the disease. In the acute stages soup of some kind or other, or milk, is needed; and as soon as appetite returns, *solid* viands of any digestible character must be given. In the graver cases where there is much restlessness and spasm or stupor, and food cannot be given by the mouth from the patient's refusal or inabillity to swallow, an attempt should be made to administer it by the rectum: when there is much thirst, the patient's fierce desire for drinks may be freely indulged. The state of the pulse is the principal guide to the use of *stimulants.* Their administration as a special remedy independently of the indications which generally govern their use has not been followed by good results; but they are called for when the condition of the pulse and the aspect of the patient show manifest flagging of the vital power. The *sequelæ* of the disease must be treated on ordinary principles.

Too frequently the state of the patient as to delirium, spasm, and irritability of the stomach prevents all internal treatment whether by medicine or food, and limits the efforts of the physician to external measures, restricting even their application. To this unhappy combination of unfortunate and uncontrollable conditions may reasonably be attributed to some extent the inefficacy of treatment."

Much might be added of personal experience, but for the present this brief

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" " et Plumbi Acet.	75	3 50
" Phosphorus Comp: Phosphorus, 1-100 gr. Ext. Nux Vom., ¼ gr		
" Potass. Iodid., 2 grs.	85	4 00
" Quiniæ Sulph., 2 grs.	2 75	13 50
" " " 3 grs.	4 00	19 75
" " Comp	1 75	8 50
" " et Ext. Belladon.	1 75	8 50
" " et Ferri	1 75	8 50
" " et Hydrarg	1 75	8 50
" " et Ferri et Strych.	1 75	8 50
" " " Valer., 2 grs.	3 50	17 25
" Rhei, Comp., U. S. P.	75	3 50
" Rhei et Hydrarg	80	3 75
" Rheumatic	90	4 25
" Zinci Valerian, 1 gr.	1 00	4 75

GRANULES.

Accurate methods and the greatest care are employed in dividing these minute doses to render them uniform and accurate.

Acid, Arsenious, 1-20, 1-30 & 1-50 gr	$ 40	$1 75
Aconita, 1-60 gr.	75	3 50
Atropia, 1-60 gr.	75	3 50
Corrosive Sublimate, 1-12, 1-20, 1-40 gr	40	1 75
Digitalin, 1-60 gr.	75	3 50
Elaterium, (Clutterbuck's) 1-10 gr.	95	4 50
Extract Cannabis Indica, ¼ gr.	60	2 75
" Hyoscyamus, (Eng.) ¼ gr.	40	1 75
" Nux Vomica, ½ gr.	40	1 75
Hydrastin, ½ gr.	35	1 65
Mercury Iodide, ¼ gr.	40	1 75
" " Red, 1-16 gr.	40	1 75
Morphia Acet., 1 gr	70	3 25
" Sulph., 1-10 gr.	60	2 75
" " ⅛ gr.	70	3 25
" " ⅙ gr.	80	3 75
" " ¼ gr.	1 00	4 75
" Valer.	1 00	4 75
Podophyllin, ½ gr.	50	2 25
Podophyllin Comp. Podophyllin, ½ gr Ext. Hyoscyam, ⅛ gr " Nux Vom, 1-16 gr	75	3 50
Quinia Valerianate, ½ gr.	2 00	9 75
Silver Nitrate, ¼ gr	75	3 50
Strychnia, 1-20, 30, 40, 50 gr.	40	1 75

Dispensed by Druggists throughout the Country.

☞ Pills Sent by Mail on receipt of Catalogue Price. ☜

WARNER'S

PIL: IODOFORM ET FERRI.

A Powerful General Tonic, and Alterative, Valuable as a Remedy in

SCROFULA, ANÆMIA, NEURALGIA, CHLOROSIS, RHEUMATISM. &c.

We make special mention of these pills of our manufacture, as the medical journals throughout the country [illegible] contributions from reliable authors who have made wonderful cures after having used, without [illegible] all other known remedies.

[illegible] bears the formula and doses.

[illegible] below a brief extract from a report of the Lehigh County Medical Society, as published in [illegible] of the Medical Society of Pennsylvania, June, 1868.

"[illegible], I gave quinine and iron and a good nourishing diet. Still I found great trouble in keeping [illegible], they would become sluggish. I tried a number of alteratives, as iodide of potas-[illegible]. Still the case progressed very slowly until my attention was attracted to an article in the [illegible] *Surgical Reporter*, 'On Iodoform and Iron.' I at once concluded to give this remedy a fair [illegible] all other constitutional treatment, and gave three pills three times a day, *manufac-[illegible] Warner & Co., of Philadelphia.* I soon had the satisfaction of seeing a rapid [illegible] pain at once left her limb, with which she had suffered continually; the [illegible] became [illegible] more abundant, and I now have the satisfaction of seeing my patient [illegible] her [illegible]. *Not a vestige of the disease is to be seen. The patient is enjoying perfect health, is [illegible].*

"[illegible], I have treated two other cases, one of three and one of four years' standing, with the same good result. I feel convinced of the efficacy of the remedy.

P. L. REICHARD,
Chairman Sanitary Committee.

☞ We furnish with orders, or when requested, a treatise in pamphlet form, detailing cures effected, and cases to which it is applicable. Price of Pills per hundred, $3.25. Liberal Discount for quantities.

PIL: PHOSPHORUS COMP:

Containing Phosphorus, One-hundredth Grain. Ext. Nux. Vomica, One-fourth Grain.

$[illegible] per Hundred. Liberal discount for *quantities.*

[illegible] is an important constituent of the animal economy, particularly of the brain and nervous [illegible], and is regarded as a valuable remedy for diseases common to them,—as in cases of [illegible] [illegible] of the Brain, Loss of Nerve Power, Phthisis, Paralysis, and Impotency. The pill [illegible] [illegible] the most desirable for the administration of Phosphorus. It is in a perfect state [illegible], as it is incorporated with Glycerine, &c., in solution.

[illegible] Dujardin Beaumetz, of the Hospital de la Petie, Paris, concludes, after an elaborate series [illegible] phosphorus in [illegible] ataxia, that—1. Phosphorus appears to have a favorable [illegible] [illegible] ataxia. 2. Phosphorus acts as an excitant and as a tonic to the nervous [illegible] [illegible] element. 3. The administration of phosphorus [illegible] in small doses, [illegible] the [illegible] of a grain, and [illegible] [illegible] when digestive troubles supervene.—*Bulletin General de Therap-[illegible]*, [illegible], Feb. 29th, March 15th, 1880.

Private Formulæ and Special Orders for Pills.

[illegible] prepared to execute Special orders of private receipts for any quantities [illegible] [illegible]. With a view to [illegible] we will therefore supply the ingredients, and give the lowest estimate [illegible] it will require but a week or a few days, except in rare instances. The [illegible] [illegible] elegant [illegible].

[illegible] W R. WARNER, [illegible] Chemist, Philadelphia.

[illegible] [illegible] [illegible] [illegible] guarantee of their excellence.

Yours, very respectfully,

JOHN M. MAISCH, *U. S. Army Laboratory,*
(Now Professor [illegible])

☞ Please Specify our make (Wm. R. Warner & Co.,) when it suits your convenience to order through other houses.

WM. R. WARNER & CO'S,

NEW REMEDIES AND PHARMACEUTICAL PRODUCTS.

These preparations are offered to supply what seems a growing necessity. They constitute most efficient remedies made agreeable to the taste with Wine, Sugar and Aromatics, and meet with a *ready endorsement by the most eminent of the profession.*

VINUM GOSSYPII RADIX RECENTIS. (Warner & Co.)

(Wine of the Fresh Cotton Root Bark.)

We offer this as the most reliable preparation of Cotton Root Bark, so celebrated as an Emmenagogue and Parturient; also valuable as a remedy in Chlorosis and Anæmia. It acts with much more certainty and efficacy than Ergot, without the disagreeable effects attending the administration of the latter, as it produces no pain or gastric disturbances and no other effect than the promotion of the menses. Being made from the recent root, gathered in the proper season guarantees uniform results, while it affords a preparation pleasing to take.

Dose.—One to two tablespoonsful three times a day.—In Pints, $2.50.

ELIXIR TARAXACUM COMP.

This is a new and valuable combination of the medicinal properties of the Dandelion, Wild Cherry and Gentian, associated with Aromatics. It is a very agreeable and efficient remedy. Aside from its medicinal virtues it is useful as a vehicle and for masking the bitter taste of Quinia. A tablespoonful three or four times a day is the usual dose.—Per Gallon, $4.00. Per Dozen. Pints, $7.00.

ELIXIR CINCHONIA CALISAYA.

(Yellow Peruvian Bark.)

This Tonic Elixir, so agreeable to the taste, comprises all the active principles of the Calisaya Bark, in their native combination, and derives additional energy from its association with several of the most grateful Aromatic Tonics.

It is admirably adapted to convalescents as an effective invigorator and restorative, rapidly improving the appetite and impaired digestion, and contributing much to the cheerfulness and buoyancy of mind.—Per Gallon, $5.00. Per Dozen, in Pints, $9.00.

ELIXIR CALISAYA, Iron and Strychnia.

Possessing the tonic and antiperiodic properties of its valuable ingredients above named, presented in the form of a delightful aromatic cordial. Each dessert-spoonful contains 1-20 grain Strychnia and 1 grain Pyrophosphate of Iron.—Per Gallon, $7.00. Per Dozen in Pints, $12.00.

ELIXIR PYROPHOSPHATE OF IRON.

This Chalybeate Elixir has the flavor of orange flowers with a beautiful transparency and delicate aroma. It is administered in Chlorosis, Debility, and in all cases where Iron may be required. It is the most pleasant and readily assimilable of the ferruginous preparations. Each teaspoonful contains 1 grain of the Iron-salt. Per Gallon, $5.00. Per Dozen, in Pints, $9.00.

ELIXIR VALERIANATE OF AMMONIA.

This Elixir combines the sedative properties of Valerian and Aromatic Ammonia without their repulsive flavor and odor. Its therapeutic properties are valuable, in such cases as would require these agents, such as Nervousness, Headache, Spasms, Hysteria, Sleeplessness, &c. Usually given in doses of one dessert-spoonful. Per Gallon, $6.50. Per Dozen, in Pints, $11.00.

WINE OF PEPSIN.

(Elixir of Pepsin.)

A solution of Pepsin in Malaga Wine with Orange Syrup. Each tablespoonful represents 8 grains Pepsin, to be given before each meal in cases of impaired digestion. Per Gallon, $11.00. Per Dozen, in Pints, $18.00.

BITTER WINE OF IRON.

An agreeable and efficient Tonic, combining the Soluble Citrate of Iron and precipitated Extract of Peruvian Bark with Malaga Wine, Oranges and Sugar. Two tea-spoonsful after each meal is the usual dose.—Per Gallon, $6.00. Per Dozen in Pints $10.00.

SYRUP OF HYPOPHOSPHITES, of Iron, Lime, Soda and Potassa.

(Dr. Churchill's Remedy for Consumption, &c.)

Each teaspoonful contains 2 grains of the Lime, 1½ grains of Soda, 1 grain Potassa, and [illegible] grain of the Iron-salt.—Per Gallon, [illegible]. Per Dozen, in Pints, [illegible].

SYRUP PHOS: Quinine, Iron and Strychnia.

A powerful general tonic, particularly serviceable in cases of Debility and Nervous Prostration, Indigestion, Chlorosis, &c. Given in doses of one dessert-spoonful, which contains [illegible] Quinine, 2 grains Phos. Iron and [illegible] grain Strychnia.—Per Gallon, $10.00. Per Dozen, in Pints, $1[illegible].

LOZENGES OF PEPSINE AND IRON.

Comment is unnecessary upon the value of this combination, and we introduce it with the [illegible] as a valuable addition to the list of new remedies. Each Lozenge contains 2 grains Pepsine, ½ grain Pyrophosphate of Iron, combined with Sugar, Vanilla and Ginger.—[illegible] per Dozen [illegible].

☞ PHYSICIAN'S SUPPLIES A SPECIALTY. ☜

TRADE MARK.

CAUTION.

Physicians and Druggists in ordering Pills of Iodoform and Iron, will please observe that they are of our manufacture, protected by Trade Mark. We deem it necessary to call your attention to this, as it is said there are pills in the market in which not half the Iodoform is represented; further, you will have noticed that the many remarkable cures detailed in the Medical Journals were effected by our Pills.

The peculiar mode of preparation and combination, from absolutely pure material, has much to do with determining their efficacy.

In ordering it would be well to specify "WARNER & Co.," that you may obtain what you desire.

WILLIAM R. WARNER & CO.,

Wholesale Druggists,

MANUFACTURERS OF

OFFICINAL AND OTHER SUGAR COATED PILLS,

PURE IODOFORM, ELIXIRS AND FLUID EXTRACTS.

No. 154 NORTH THIRD STREET,

PHILADELPHIA.

Price Lists furnished on application. **Liberal Discount for quantities.**

Notice to Physicians.

The [illegible] of Officinal and other SUGAR COATED PILLS as made by us, is an indispensable [illegible] and a matter of so much importance as to command your special attention. An experience of thirteen years with careful attention and study, has enabled us to achieve a perfection [illegible].

We claim the art of Sugar Coating, avoiding the necessity of drying so hard as to render them [illegible] and [illegible] to make them permanent.

[illegible] engaged in the Wholesale Drug business, and in the manufacture of Standard [illegible] preparations and New Remedies, in our own Laboratory, affords us facilities for supplying Physicians [illegible] with all articles of the purest quality at the lowest prices.

☞ A discount of 25 per cent. will be made to Physicians on all orders for Pills amounting to $10 [illegible]. [illegible] quantities will be sent by mail or express prepaid on receipt of catalogue prices.

Please specify our make (W. & Co.) when it suits your convenience to order elsewhere. [illegible] paid on shipments of Drugs to distant points.

Sold by

W. H. PEABODY, Druggist, Buffalo, N. Y.

outline will suffice. At present, in Buffalo, the severity of attack in new cases is less than at first outbreak of the disease.

———:o:———

Calabar Bean in Spotted Fever.

In our last issue we made reprint of an article in which calabar bean was spoken highly of as a remedy in cerebro-spinal meningitis. Without intending to recommend this drug or give the idea, that it is generally accepted as useful in the treatment of this fearful malady, we still desire to say, that fresh supply has been received by Mr. Wm. Peabody, and that any who desire can take the opportunity to test for themselves its virtues. The following letter we are allowed to copy which fully explains itself.

BROOKLYN, April 10th, 1872.

Mr. W. H. PEABODY, Buffalo.—*Dear Sir.*–The extract calabar bean goes by this mail as ordered. In reply to your inquiry as to what I know of it, dose etc., I must reply that I only know what I read, and that seems to lead to the conclusion that very little that is at all definite has been yet attained, except in eye surgery. It is evidently a potent agency and requires much observation. In tetanus it has not fulfilled the expectations of those who at first spoke highly of it.

This alcoholic extract as sent you is very good and represents the Bean in the proportion of about 2 p. c.. That is 100 lbs Beans yield about 2 lbs extract. I have not known it to be given in more than $\frac{1}{4}$ grain doses, and it is more frequently given in $\frac{1}{8}$ grain doses, and the smaller is the better to begin with. It should however be increased till the effects are obtained. I can hardly credit the large doses lately reported, two or three grains, if the extract was good.

Very respectfully yours, E. R. SQUIBB.

———:o:———

American Medical Association.

WM B. ATKINSON, Permanent Secretary, 1400 Pine Street, Southwest corner Broa
Philadelphia.

The Twenty-third Annual Session will be held in Horticultural Hall, Broad Street above Spruce, on Tuesday, May 7, 1872, at 11 A. M.

RAILROADS.—Union Pacific, return free, if first-class tickets are bought, and an acknowledgement taken from the agent. Cumberland Valley, excursion tickets. Orange, Alexandria, and Manassas, half fare for return. Pittsburg, Cincinnati, and St. Louis, excursion tickets. Pittsburg, Fort Wayne, and Chicago, excursion tickets. Cleveland and Pittsburg, excursion tickets. Central Railroad of Georgia, return free. Richmond and Petersburg, return free. Wilmington and Weldon, excursion tickets one fare. Wilmington, Columbia and Augusta, excursion tickets one fare. Kansas Pacific, one and one-fifth fare for excursion. Atlanta and New Orleans Short Line (A. and W. Pt. Western, Mobile, and M. N. O., M. and Texas Railroads), return free. Western and Atlantic, excursion tickets one fare. Western Alabama, excursion tickets one fare. Evansville and Crawfordsville, excursion tickets. Lehigh Valley, excursion tickets one fare. Louisville and Nashville, excursion tickets. Memphis and Louisville, excursion tickets. North Pennsylvania, excursion tickets two-thirds fare. Pennsylvania Central, excursion tickets. Philadelphia and Erie, excursion tickets. Philadelphia, Wilmington and Baltimore, excursion tickets. Philadelphia and Reading, excursion tickets at two-thirds. Baltimore and Ohio, excursion tickets. Lake Shore and Michigan Southern, excursion tickets if forty are taken.

☞ All who desire to avail themselves of the above rates, must send to the Secretary their full names, and the names of *all* the railroads over which they must travel in coming to the session, with stamp for postage.

WM. B. ATKINSON.

SPECIAL.—Camden and Amboy, excursion tickets at $4 from New York to Philadelphia and return, if fifty tickets are taken. For this ticket, send money to Dr. A. E. M. Purdy, 123 East Thirtieth Street, New York.

From Montgomery, Ala., to Philadelphia, and return (by Tennessee) $39 80. Apply through Dr. R. F. Michel, Montgomery, Ala.

From Washington to Philadelphia and return, $6, if fifty tickets are taken

Central Pacific, half local rates.

:o:

Death of Dr. Zina Pitcher of Detroit.

It is with regret that we learn the death of this eminent member of the profession, who died at his house in Detroit on the 5th of April, at the advanced age of 75. Dr. Pitcher was a man who stood high in his profession and whose loss will be felt by his associates. The following resolutions were adopted by the profession in Detroit:

Resolved, That we have heard with profound grief of the death of that great and good man, our distinguished fellow-citizen and late associate, companion, friend and counselor, Dr. Zina Pitcher.

Resolved, That the medical profession, of which he was a member, a pillar and an ornament, have thus sustained an irreparable loss.

Resolved, That this city and the State of Michigan have been deprived of one of their oldest, truest and best public servants.

Resolved, That in token of our love for the man, our high appreciation of his personal probity and the great good to society at large which his life has fulfilled, we will attend his funeral in a body as mourners.

:o:

Cundurango by its Friends.

Through the kindness of Dr. John S. Perkins, of this city, we have been put in posession of some very interesting letters from persons whose names appear on Bliss, Keene & Co's certificates. The letters (five in number) do not seem to be very commendatory of the drug. Two of them from medical men deny ever giving any testimonials of its virtue whatever. Vice President Colfax says he always declines to sign certificates of any kind, but says that a *private* letter of his once got into print and was extensively published. The remaining two from persons outside of the profession do not give evidence of any remarkable cures. In fact both state that in the cases observed by them *no cure has been affected*, but they *think some* benefit has been derived from the use of Cundurango. The proprietors of Cundurango seem to have followed in the steps of all quack medicine venders, and secured certificates no matter by what means. One of the physicians alluded to, Dr. Fitch, of Chicago, says: "I have never authorized the use of my name in the connection you speak of, (Cundurango), and from this fact alone I am satisfied that the whole thing is a money making scheme and I may say a humbug."

Books Reviewed.

A Treatise on Human Physiology; designed for the use of students and practitioners of medicine. By John C. Dalton, M. D., etc. Fifth edition, revised and enlarged. Philadelphia: Henry C. Lea, 1871.

The fifth edition of this truly valuable work on Human Physiology, comes to us with many valuable improvements and additions. As a text book of Physiology the work of Prof. Dalton has long been well known as one of the best which could be placed in the hands of student or practitioner. Prof. Dalton has, in the several editions of his work heretofore published, labored to keep step with the advancement in science, and the last edition shows by its improvements on former ones that he is determined to maintain the high standard of his work.

Space will not permit us to note the additions and improvements made, and indeed, the work has been too long before the profession to need extended notice. We predict for the present edition increased favor, though this work has long been the favorite standard.

Physiology of the Soul and Instinct, as distinguished from Materialism. By Martin Paine, A.M., M.D., LL.D., etc. New York: Harper Bros, 1872.

To give an extended and just notice of this truly learned and interesting work, requires more space than our pages can afford in the present issue. The several subjects treated of are taken up in the regular order and show evidence of being treated by a master hand. The present work may be considered as an enlarged and revised edition of the work of Prof. Paine, published in 1848, on the Physiology of the Soul and Instinct. The author, although stating his ideas in a clear and concise manner, and replying to the theories of some of the modern Philosophers in his well known vigorous style, seems to us, to have too little charity for those who hold opinoins in opposition to his own. The whole subject is ably treated, and the illustrations clearly and forcibly drawn. The work cannot fail of being accorded a high position in the literature on the subject of which it treats.

Books and Pamphlets Received.

Reports of the Board of State Commissioners of Public Charities of the State of New York for 1868, 1869, 1870.

Report of the Board of State Commissioners of Public Charities of the State of New York relating to the Insane, and the capacity and cost of the several State Insane Asylums, transmitted to the Legislature March 9, 1872.

Second Inaugural Address of Hon. Alexander Brush, Mayor of Buffalo, to the Common Council, Feb. 12, 1872.

Annual Report of the Board of Health to the General Assembly of Louisiana, Dec. 31, 1871.

Transactions of the Homœpathic Medical Society of the State of New York for the year 1870, Vol. VIII.

Transactions of the Eclectic Medical Society of the State of New York, for the year 1871.

Proceedings of the Twenty-first Annual Meeting of the New York State Homœpathic Medical Society, 1872.

Annual Address, delivered before the Cleveland Homœpathic Hospital College, Feb. 14th, 1872, by J. D. Buck, M. D., Professor of Psychology.

The Lens; a Quarterly Journal of Microscopy and the allied Natural Sciences, with the transactions of the State Microscopical Society of Illinois. Edited by S. A. Briggs.

Catalogue of Second-Hand and Valuable Medical and Surgical Works, for sale by James Campbell, 18 Tremont street, Boston, Mass.

Report of John M. Woodworth, Supervising Surgeon U. S. Marine Hospital Service.

Case of Bright's Disease of the Kidneys, determined by the Ophthalmoscope. By Ruben Vance, M. D., New York.

Injuries of Nerves and their consequences. By S. Weir Mitchell, M.D., etc. Philadelphia: J. B. Lippincott & Co., 1872. Buffalo: Breed, Lent & Co.

Lectures on Aural Catarrh; or the commonest forms of deafness and their cure. By Peter Allen, M. D. New York: Wm. Wood & Co., 1872. Buffalo: Breed, Lent & Co.

The Treatment of Venereal Diseases; a monograph on the method pursued in the Vienna Hospital, under the direction of Prof. Von Sigmund. By M. H. Henry, M. D. New York: Wm. Wood & Co., 1872. Buffalo: Breed, Lent & Co.

Lithotomy and Lithotrity, illustrated, by cases in the practice of Gordon Buck, M. D., Surgeon to New York and Presbyterian Hospitals. New York: Wm. Wood & Co., 1872. Buffalo: Breed, Lent & Co.

BUFFALO
Medical and Surgical Journal.

VOL XI. MAY, 1872. No. 10.

Original Communications.

ART. I.—*Clinical experiences in private practice. Complicated Chronic Case.* By Z. C. McELROY, M. D. Zanesville Ohio.

Read to Muskingum County Medical Society. April session, 1872.

Mrs. M. T., age not certainly known, but not far from 55. Native of Ireland, has resided in this country about 30 years. Has had thirteen children, seven of whom are living. Her life has been one of hardship, toil, poverty, and deprivation. Has had much of the time only the bare necessaries of life, often hardly these, and but little of its ease and comforts. Her husband died eight or ten years since in the army. His bounty at enlistment purchased a small homestead, which she still owns and occupies, and she draws the annual pension paid to the widows of privates, minus the commissions of agents. She is of small stature, and never otherwise than spare in flesh. Several of her children came to their end by violence, railroad accident, drowning, &c. Her cup of sorrow, disappointment, bereavement, poverty and want, has been through life more than filled. Personally, I have known her for many years, and have frequently rendered professional services to herself and family before, but not during the last three years. Prior to that time I had used the hypodermic syringe several times on her to relief paroxyoms of difficult breathing. [Asthma]. But while she obtained prompt relief each time it had been used, she did not like, she said, to have a *prod* used on her.

28th Dec., 1871. Has been sick for nine weeks past, and up to four or five days since has had the services of a physician all the time. He dismissed himself on account of absence from the city. She is propped up in an arm chair, and is much emaciated; breathing labored, quick and shallow; lips purplish; coughs a good deal during the day, and is able to get but little sleep for coughing at night; is not able to lie down at all some nights; passes but little urine, and what she does is very dark colored; bowels only move as she takes pills, eats very little, and drinks still less; does not drink half pint of fluid in 24 hours; has not improved any during the whole nine weeks of her present sickness; pulse good considering her condition, 90 per minute, fair volume, and regular, temperature 101. She said her previous medical attendant did not give her much encouragement as to her getting well; said that she had so many diseases that he could only treat a few of them at a time. She exhibited to me several medicines she was taking for the cure of about half her diseases. I felt curious enough to inquire of her what diseases she now had. She very naively commenced telling me their names, but as she progressed I found them so numerous that I took out my memorandum case and asked her to commence again and name them, so that I could write them down. She smiled rather incredulously, said the Doctor told her she had them, but I assured her that I was seeking information, and was afraid of my memory. I wrote them down as she named them, and they are as follows:

The Asthma, the Rheumatism, the Neuralgia, the Fevers, the Piles, the Dyspepsia, the Water brash, the Liver Complaint, her Kidneys affected, her Lungs affected, her Head affected, her Bowels affected, and threatened with the Dropsy.

Her medicines were for her Kidneys, the Piles, the Asthma, the Neuralgia, the Rheumatism, and her bowel affection.

When the list was complete I read it over to her, to be sure that all was right. She seemed a little surprised at their counting up thirteen, and did not seem to realize that she was half so bad as the list seemed to make her. I told her it appeared to me there must be some mistake about the matter, and asked her if any part of her was well. After some hesitation she said she did not think there was. "Well, then," I said "it must be that it is you that is sick, and not parts of you as the names of these diseases which I have written down indicate." "Well, I believe you are right, Doctor, it is me that is sick, and I am sick all over."

When I was a boy at school, studying arithmetic, if I worked out a sum whose figures covered my slate, and I did not get the right answer, I rubbed it all out and took a fresh start, and I studied arithmetic before the modern method of concellation was in use. Everything had to be worked out the long way. And that was the way the sum of this woman's tribulations had been worked out, and a correct answer had not been reached. So, school boy like, I said to myself, I will rub it all out and take a fresh start, with modern methods of concellation to aid me in reducing its apparent complexity to order, and abbreviate the processes of reaching the law of order which certainly underlies the apparent confusion presented in this case.

That this woman has thirteen different diseases at one and the same time, is to my mind an absurdity. The complexity it presents is all of human creation, and not according to nature, or any natural law at all. The idea of separate and distinct diseases, or indeed of diseases at all, is a human invention entirely, had its origin far back in the non-scientific past, and ought long since to have been dropped out of consideration in the study of human pathology.

In the reduction of the phenomena presented for my study by this woman's case, the first conclusion I reached was that it was her that was sick and not parts of her, or a part of her only.

Striking from the total phenomena of her body all that is not natural and there is literally nothing left, unless her mind is excepted, for it is apparently not nearly so far wrong as almost every other process of her body, though it shares her general feebleness. The temperature indicates a waste of structure in the performance of function at a higher than natural velocity, but not so high as to put in immediate danger her minute forms of structure; while on the other hand, the reproduction of her wasting structures from new material is much below the natural velocity, leaving a wide difference between the ratios of repair and waste. And besides, the very small amount of food she takes could not by any possibility supply the material necessary for the repair of her structures at their present rate of waste. Up to this time, in all probability, no positive loss of minute forms of structure have occurred in her body at other points than those concerned in the production of the phenomena called asthma. Elsewhere, apparently, the conditions and material for repair are simply absent, rather than that any permanent changes of structure exists, except, perhaps the hæmorrhoidal vessels. And for the additional reason, that a cancellation of all the phenomena she presents leaves the single prominent fact that repair is the most defective process of her body.

What are the conditions of repair? Clearly they are:

1st. Materials.
2d. Force for carrying material up through various chemical mutations to living flesh.
3d. Sufficient water to effect the solution of materials in their careers, upwards to forms of structure, and downwards and outwards, as effete matter.

Her structures, as my own, as every other thing endowed with life, animal or vegetable, in the acts of functional decay—the descent of material from chemical condition in living tissue, to the state in which it finds exit from living bodies—stores up, in one or more of the compounds then formed, the neccessary force to carry its own, and new material up to the forms of structure from which it was derived.[1] In no other possible way can personal identity be mantained through the life of a single individual, or that of a species, or a race, through centuries. And this is one of those sublimely simple laws, which shed such a flood of light on the complex phenomena of life—viz—that organic structures in the act of functional decay, store up the force for their own reproduction from new materials.

The annuals of the vegetable world—corn, rye, wheat, etc. etc.—are models of industry and fidelity to the main purpose of all life. No superior force preventing, and the conditions for their work present, they never halt a single moment in the accomplishment of the main purpose of their own, and all life, viz—to provide for their own reproduction from new material. And when this purpose is accomplished, they are dead, or die soon after; for death is the parent of all life.

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[1] Buffalo Med. & Surg. Journal, July 1871.

Of the special conditions absent in the case now under study, the absence of new material is, perhaps, the most prominent. Then there is an absence of the necessary force to carry new material up through its necessary changes to living structure, capable of performing a function, and providing for its own reproduction and multiplication.

Again, there is a condition of physical motion, as well as a derangement of physical motion, incompatible, from increased velocity, with repair from new materials. Lastly, there is not sufficient fluid—that is water—to furnish the conditions for normal repair and waste.

What is my duty, as a physician, towards this woman? And what means are at my command to supply these obvious deficiencies? My duty is clearly to supply, as far as possible, these defects —dropping out of consideration any mental conception commonly associated with the term "disease," or the "cure of disease, or diseases." Not only this, but I must also drop out of consideration, in prescribing, the entire classifications of medicines, or remedial agencies now in use, for, if these several factors are admitted in the working out of the sum, or problem, a correct solution, representing, in mental conceptions, the facts actually concerned in the case will never be reached.

The indications for supplying these defects are, to retard physical motion, so as to allow her to rest and sleep in the horizontal position. Sleep is an essential condition for the repair of all of the structures.

The means to fill these indications are as follows: to procure sleep, chloral hydrate, as the material of chloral hydrate stores up a mode of force which promptly retards the rate and mode of motion in living bodies preventing sleep. But, as it contributes nothing to the sum of force available for repair, some other agent retarding motion, and at the same time supplying force and conditions for repair must be combined with it. And that which best supplies these conditions is found in opium. She is therefore to have the following. ℞ Chloral hydrate ʒiv. Sulphate of morphia gr. ij. Menstruum ℥iv. Dose, one tea spoonful every hour until she can sleep lying in bed. When the requisite amount to procure rest is ascertained, let it be one or several tea spoonsful—that will be the dose when subsequently needed.

The next defect to be supplied is material for the construction and re-construction of her various tissues. She is, therefore, to have a good diet—bread, milk, meat, butter, fish, fowl—and in a word—good living. And as she cannot be expected to take meals as in health, she is to eat as many more times per day as she would if well, at least for the present.

I have now provided for retarding motion as near to the physiological velocity as possible, and for new material. But the force supplied by her wasting structures, stored up in her lymph, will not, without some aid be competent to carry these new materials up to the forms of her living structures. That which stores up this supplemental mode of force, and is best adapted to meet the wants of the present case, is supplied by what is known in the materia medica as "peculiar bitters." For the present case, then, an ounce of prickly ash bark, in two quarts of boiling water, to be made each evening, and the whole of the infusion drank the next day. At equal times, say morning, noon and evening, she is to add to a portion of the infusion twenty to thirty drops of Aromatic sulphuric Acid. This will supply two defects—to wit—force, and water sufficient to carry on properly the work of molecular repair from new material.

There remains but one other defect to be supplied, and that is elimination. For this purpose she is to have one or more tablespoonsful solution of saline sulphates, in a tumbler of water, either cool, or very hot as she prefers, and may be taken not more frequently than every third night at bed time, or in the forenoon ℞ Sulph Magnesia ℥iv. Sulph Potass ℥iss. Sulph Ferri ʒiij. Boiling water ℥xv. Dissolve and add Elix. Vitrol ℥iss—Filter.

As my interview occurred late in the afternoon, nothing was to be taken that day or night but the chloral mixture. I knew enough of my patient's character to feel certain that my request would be punctually complied with, and as I felt reasonably certain that my expectations would be realized, I promised to call on the following Saturday.

Dec. 30th. Patient took chloral mixture as requested, slept all night, and felt herself quite a different being from what she had been the day before. Coughed a good deal after rising, but has taken food, and infusion as requested since. She is much better this morning. Breathing quite easy, little or no pain anywhere, she thinks her kidneys have got well already, as she now passes a good deal of water, not so highly colored, and without distress. Cannot say she enjoys her food, but eats it as a matter of duty.

As everything is working so satisfactorly, she is requested to continue treatment, and I am to visit her middle of next week.

Having to visit a neighbor of hers next day, she sent one of her children to request me to come and see her. The weather was very inclement and stormy. I found her in her chair again unable to lie down, breathing very much embarrassed, and is coughing almost incessantly. I gave her a tablespoonful chloral mixture, and requested her to repeat it in an hour, and every hour until she ceased coughing, and could lie down and sleep. Continue food and infusion.

January 2nd, 1872. Patient speedily got relief after I left her on Sabbath. Has been better ever since. Begins to enjoy her food, is very cheerful and pleasant. She is to continue treatment as before, taking chloral in any quantity needful to arrest coughing and procure sleep.

January 5th, 1872. Patient rapidly improved, is dressed and going about the house. Looks better, says she feels better every way. Sleeps and eats well, and thinks she is rapidly getting well.

January 13th, 1872. Patient still better. Continue treatment.

January 22d. Found patient at the wash tub. Has quite regained her usual health.

Requested her to continue the infusion a few days longer, and to take chloral when necessary.

Did not see patient again until about the middle of March. I called to get particulars of her case, and ascertain present condition. She considers herself as well as usual; attends to all her customary duties, and ceased to take any medicine some time since, excepting chloral mixture, and that only when changes of weather bring on difficult breathing, or cough, or both.

I think it reasonably certain that had I been guided in the professional management of this case by the worn out theories of life now governing the professional mind—i, e—vital force or forces, diseases, cure of diseases, the classifications of medicines, &c. I should have had about the same success as my predecessor, and he was a regular physician of good repute. I did not have to "try the effects" of this or that "remedy." I did not treat any of her so called diseases; did not cure any of her so called diseases. My attention was given to the woman, and my purpose was to supply defects, simply—in the processes needful to carry food up to normal forms of structure. And it seems to me the results justify the wisdom of my course.

An eminent living writer said, during our late civil war, that the public—that is the human—mind is slowly educated by arguments, but quickly by events.

In medical matters, it seems to me both are better than either separately. Hence, in the report of this case I have linked them together.

But it must not be understood that all chronic sickness can be thus speedily relieved. Changes of structure lie behind many of the discomforts and departures from health in the lives of old and young. For loss or complete changes in the minute forms of structure, there are no known means of restoration at the command of physicians. They must be content to make the most and best of what is left; and, an extended experience convinces me that in the general course here indicated, subject to modifications to adapt it to each individual case, the highest results attainable by medical art are realized.

And I further conclude that one of the lessons to be learned in this way is, that every complexity in organic life, pathological, or physiological, has underlying it a few simple physical laws; and that all through the wide domain of organic life, law and order reigns supreme.

ART. II.—*A case of Placenta Prævia, terminating in death on the thirteenth day after delivery. By* W. F. HUTCHINSON, M. D. *Minneapolis, Minn.*

Tuesday, Feb. 1, 1872.—I was called to attend the accouchement of Mrs. G. aet. 40, primapara.

For two or three days previously a slight discharge of blood had been noticed, which had gradually increased in quantity until suspicion was aroused that something beyond the usual phenomena of a lying-in chamber was about to occur.

I found the lady comfortable, except that the flow of blood was greater than it had been, and that she felt slight premonitory pains. When making an examination by the touch I discovered a remarkable degree of ante-version; so great that the os uteri was too far up in the hollow of the sacrum to be reached by the finger. I therefore slowly and cautiously introduced the entire hand, and found the labor begun, with a dilatation of about one half inch. The presentation could be made out as vertex, and the edge of the placenta felt, distinguished by its peculiar textile feel, implanted on the left side of the cervix. At this time she was bleeding but not to any great extent, active dilatation not yet having commenced.

As there was plenty of time, counsel was summoned and the diagnosis verified. The os was tense, hard and thin, and, with the slightness of the bleeding and great strength of the patient it was decided to wait.

The vagina was carefully tamponed, a quarter of a grain of morphia administered, and the case left for a few hours rest, under the supervision of Mr. Neill, medical student.

Eight P. M. Patient had slept quietly and Mr. Neill reported only slight oozing, apparently between the tampon and maternal organs. Pulse 80, full and regular.

The tampon was cautiously removed and dilatation found to be increased to about two and a half inches, with the os in the same position, viz: the hollow of the sacrum, looking backwards, tense and hard. Pains now begun to recur at intervals of from fifteen to twenty minutes, a gush of blood accompanying each contraction.

The membranes were ruptured, a drachm of Squibbs' fluid extract of ergot administered, and all preparations made for version, but in a few moments, the pains became stronger, and the head descending, impinged upon the placenta, shutting off the blood.

From this time labor progressed steadily until at three A. M., the child was born, accompanied with so great a gush of blood as to excite fear of immediate dissolution. Introducing the hand, the placenta was at once detached from its uterine attachment and thrust into the vagina, the hand being retained in the uterine cavity. Contraction was induced by firm pressure externally with iced cloths, and titillation within, administering at the same time two drachms more of the ergot in an ounce of brandy. In ten minutes the organ threw out the hand and was reduced to about the size of the fœtal head, with srarcely a trace of the previous frightful hemorrhage. The child, a strong female, was then severed from the placenta and attended to.

Patient expressed herself comfortable, but was very weak and exhausted, with a small fluttering pulse at 90, and great tendency to faintness. She was enjoined strict quiet, the hips raised, and brandy and carbonate of ammonia freely given until she revived, when the child was applied to the breast to further excite the uterus to contraction.

At 6 A. M., all being quiet, a firm compress was applied over the hypogastruim and the patient left to rest.

Called at 9 A. M., and found my patient still quiet, but very weak, Pulse unchanged.

On inspection of the pudenda, I discovered large clots of blood, and introducing the finger into the vagina, found it filled with the same. These were turned out, iced cloths applied to the vulva, and a mixture of aromatic sulphuric acid, ergot and opium directed to be given every second hour. The bleeding being thereby again checked, she was placed upon a diet of cold beef essence and Fougera's Nutritive Wine, a preparation said to contain an ounce of the soluble constituents of beef to each ounce of wine.

From this time for five days no untoward symptom appeared, all going on nicely. Upon the morning of the sixth, I was summoned with great haste. She was bleeding again. When arriving at the house, two miles distant, I found her lying in a pool of blood, apparently moribund.

The uterus had completely relaxed, so as to admit the hand with ease still retaining its extreme anteversion. Ice, ergot and stimulants were freely employed, with the effect of again arresting the flow, and brandy milk punch ordered in place of the nutritive wine.

I regret to be compelled to state that from this time to her death which occurred seven days thereafter, all treatment was useless, and Mrs. G. presented the singular spectacle of slow death by inanition, while the appetite was good, the mind unclouded and the amount of ingesta averaged a pound of beef essence, with two tumblers of brandy milk punch per diem. Vital power was so completely paralyzed by depletion that no assimilation could be carried on, and the food was passed her anum with scarce a vestige of change from the condition in which it entered the mouth. Pepsine and pancreatic emulsion were freely used, with the hope of effecting artificial digestion, but to no avail.

I am induced to place this case on record for two reasons; first, that any contribution to the history of placenta praevia cannot be uninteresting to the profession in its present state of information on that point. Second, that I regard the manner of my patient's death as altogether singular.

In a future article it is my purpose to lay before the readers of this journal some ideas relative to this most terrible accident of the lying-in chamber, concerning which Professor Simpson remarks that the "peril of life is as great as though the patient were seized with yellow fever. or malignant cholera ; that it is twice as dangerous as the operation of lithotomy—one in every three perishing under the former, and one in every six or eight perishing under the latter."

Every step in this direction I regard as one taken aright, since, even if finally proven to be wrong, it may still guard others from following the same path, hitherto so slightly explored.

ART. III.—*On the recent Advances in the Theory of Vision.* By H. HELMHOLTZ, (*of the Royal Society of London.*)

Translated from *Les Annales d'Oculistique*, BY F. W. ABBOTT, M. D.

(*Continued.*)

The theory of color, with all the curious and complicated circumstances which I have just described, was a problem which was insoluble not only by Goethe, but other physicists and physiologists. I myself, likewise, wasted a long time in unavailing efforts, when I finally discovered that a solution of surprising simplicity had already been found and published, at the commencement of this century. It was by the same Thomas Young who took the first step in reading the Egyptian hieroglyphics. He was one of the most profound geniuses who have ever lived; but he had the misfortune to be in advance of his age. His contemporaries admired him without being capable of following the bold flight of his combinations. Hence a quantity of the most important of his ideas remained buried and forgotten in the records of the Royal Society of London, until a new generation made again laboriously and step by step his discoveries, and became convinced of the accuracy of his assertions and demonstrations.

While explaining here the theory of colors established by Young, I will observe that the conclusions which we shall draw from it farther on, relative to the nature of visual sensations, are entirely independent of what this theory presents that is hypothetical.

Thomas Young says that there are in the eye three kinds of nerve fibres, the first of which, excited it matters not how, produce the sensation of red; the second, the sensation of green, the third that of violet. He says, further, that the first are excited the most by the luminous vibrations of the ether whose wave-length is greatest, that the fibres sensitive to green are excited especially by waves of medium length, and that the fibres sensitive to violet are principally excited by rays of the shortest wave-length. Thus, the irritation of the fibres sensitive to red would predominate in the red extremity of the spectrum, and it is for this reason that this extremity appears red to us; farther on an irritation of the fibres sensitive to green would be added, and it is to the mixture of these sensations that we give the name of yellow: in the middle of the spectrum, the irritation of the nerves sensitive to green would dominate over both the others and the sensation of green would be dominant; the mixture of this sensation with that of violet would give blue; finally, at the end of the spectrum which is most refracted, the sensation of violet would dominate.[*]

We see that the hypothesis of Young is nothing else than a specialisation of the law of the specific energies of the senses, just as much as that the difference between the sensation of light and that of heat depends solely upon the nature of the terminal fibres, optical or sensitive, which are hit by the rays of the sun. According to the hypothesis of Young, the difference between the sensations of color depends upon the relative degree of irritation of the three kinds of fibres of which he supposed the existence. The equal irritation of these diverse fibres gives the sensation of white.

We may therefore explain the phenomena of anerythropsy by supposing that the fibres sensitive to red are incapable of irritation. It is probable that towards the periphery of the retina of the normal eye these fibres sensitive to red are wanting, or are very few in number.

In man and the other mammalia, we do not yet know any anatomical fact which we can bring to the support of this theory of the colors. But Mr. Max Shultze has found in birds and reptiles a structure which evidently bears a relation to this theory. In the eyes of many of these animals, some of the rods of the sensitive retinal layer have a red oily droplet upon their anterior end, the one turned towards the light; other rods have a yellow droplet; others have none at all. Now, it is beyond a doubt that the red rays penetrate more easily than any others into the rods with a red droplet; that blue, yellow and green rays produce relatively more impression upon the rods with yellow droplets; blue rays are probably almost entirely excluded from these two kinds of rods to affect only the more strongly the uncolored rods. It is therefore very probable that these different rods are the terminal organs of the nerves sensitive to red, to green, and to blue.

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[*] We have not yet succeeded in exactly determining by experiment the three fundamental colors. In regard to red alone there is no doubt; experiments made upon certain persons affected with color-blindness prove that this color corresponds to the extreme red of the spectrum. Thomas Young chose violet as the fundamental color of the other extremity, while Maxwell found the probabilities greater in favor of blue; we cannot yet definitely decide the question.

A very analogous hypothesis has since appeared to me to be well fitted to explain, in the simplest manner, the peculiarities, just as remarkable, which the perception of musical sounds presents. We know that in the cochlea of the ear the extremities of the nerve fibres are regularly spread out beside one another, and are furnished with little elastic appendices, which are called the *fibres of corti*, which are arranged regularly beside one another, like the keys and hammers of a piano forte. I supposed that each particular nerve fibre is capable of perceiving a sound of a certain pitch, that one which makes it elastic appendix vibrate the most strongly. This is not the time to dwell upon the special characters of the sonorous sensations which have led me to propound a hypothesis whose analogy to the theory of colors of Young is evident, and which reduces to a principle, just as simple as that of Young's theory of colors, the formation of harmonics and of beats, the perception of timbres, the difference between consonance and dissonance, the formation of the musicial garnut, etc. I ought to say that the ear offers an anatomical structure much more easily reconcilable with a hypothesis of this kind; we have even succeeded lately in obtaining a direct verification of it, not in man or the other vertebrata, in whom the labyrinth of the ear is too inaccessible, but in certain marine crustacea. In these animals the appendices of the auditory organ are external; they may be observed upon the living animal in the form of articulated hairs in which the fibres of the auditory nerve terminate, and Mr. Hensen (of Kiel) has been able to show that different sounds cause sometimes one part, and sometimes another of these hairs to vibrate.

It is necessary for us to reply here to an objection which may be made to the theory of colors of Thomas Young. I have said before that, in the representation of the system of the colors upon the chromatic table, the line where the most saturated colors—those of the spectrum—are figured resembles a triangle. Now, our arguments upon the theory of three fundamental colors demand that this triangle should be absolutely rectilinear, because thus only is it possible to obtain all the colors by the mixture of the three fundamental colors situated at the angles of the triangle. But, let us not forget it, the chromatic table contains all the colors of the external world, while in the theory which occupies our attention, the question is concerning the composition of sensations. It suffices to suppose that objective lights* do not produce perfectly pure colored sensations, that is to say, that simple red light, even perfectly free from white light, does not excite solely the fibres sensative to red, but also, though feebly, the fibres sensitive to green, and still more feebly those sensitive to violet. Therefore the sensation which the purest red light produces in the eye is still not the purest sensation of red, and we may conceive of a red more saturated still than that of which any color of the external world can give us the impression.

Experiment confirms the occuracy of this supposition, and it is possible to obtain such a sensation of more saturated red. This fact is very important, not only because it overthrows an objection which may be made to the theory of Young, but also on account of the signification which it possesses in relation to sensations of color in general. To describe this experiment, it is necessary to commence by setting forth an entirely new order of phenomena.

Every nervous apparatus becomes fatigued when it is kept in activity, and this by so much the more as it acts with greater intensity and for a greater length of time. The red blood which runs in the arteries constantly renews the effete matter, and repairs the changes produced by the activity, that is to say, the fatigue. The same thing takes place in the eye, when we fatigue the retina over its whole surface by remaining, for example, some time in the open air on a clear day, it becomes insensible to a feeble light. If we then enter a dark place, at first we can see nothing; we then say we have been blinded. After some time the eye recovers itself, and finally we see well enough, to be able to read in a place which at first appeared completely dark.

In this manner general fatigue of the retina is manifested; but a partial fatigue may also be produced, when one part only has been strongly illuminated for some time. If we fix our eyes for some time upon a point of a bright object which is isolated on a dark back-ground—the fixation is necessary so that the bright image may remain immoveable upon the retina and fatigue only one accurately defined portion of its surface,—and then turn the eyes toward a surface of a uniform dark gray tint, we see upon this surface an *accidental image* of the object previously seen ; the contours have not changed but the illumination has become inverse, the dark surface appears bright, and the bright object dark, just as it would have been on a photographic negative. By carefully fixing we may obtain very finely drawn accidental images ; sometimes we may even distinguish letters. The accidental image is formed as a consequence of local fatique ; the parts of the retina which have been strongly illuminated perceive less clearly than the surrounding parts the light of the gray surface so that upon this perfectly uniform surface we think we see a dark spot equal in extent to that which was just before very bright.

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* [Our Author applies the term *lights* to those objects which reflect light, as well as to those which produce it. Trans.]

Sheets of white paper in a good light are sufficiently luminous objects for the formation of accidental images ; when we look at much more luminous objects, such as the sun or flames, it happens that during the first instants the positive accidental image, produced by the persistence of the impression, superimposes itself upon the negative image which is the effect of fatique ; moreover, the different colors contained in white light produce effects differing in duration and force. As a result we then see colored accidental images, and the whole phenomenon becomes much more complicated.

Accidental images furnish an easy means of demonstrating that the intensity of the impression produced by a bright surface commences to diminish from the first seconds, and that after a minute it is generally reduced one half or three fourths. The simplest manner of trying the experiment is, to half cover a sheet of white paper with a sheet of black paper, then to fix the eyes upon a certain point of the white sheet near the border of the black one, and to quickly draw away the black sheet, after from thirty to sixty seconds, without moving the eyes. Then, at the place which was black the impression of white is produced with its first freshness. and one is astonished to see how much the impression has become enfeebled and deadened for the rest, during the little time that the experiment has lasted. It is neccessary to remark, however, that this great diminishion of apparent intensity passes completely unerceived so long as we do not remove the black paper.

We may observe still another kind of partial fatigue, relating to certain colors only.

It is sufficient for this to expose the whole or a part of the retina to the illumination of a single color for some time, that is to say from thirty seconds to five minutes. According to the theory of Young it is clear that, in this experiment, fatigue affects only one or two kinds of fibres sensitive to light, and does not act upon the others. It follows from this that if we look, for example, at the accidental image of red upon a gray surface, the uniform light of this surface can produce strongly only sensations of green and violet in that part of the retina fatigued by the red. This part is slightly affected with anerythropsy; its accidental image therefore appears bluish green, the color complementary to red.

This, finally, affords us the means of really producing upon our retina unadulterated sensations of pure and saturated colors. To obtain saturated red, for example, we have only to fatigue one part of the retina with the blueish green of the spectrum, the color complementary to red. We thus render this part of the retina blind, for the time, to the green and the violet. Let us project the accidental image thus obtained upon the red of a prismatic spectrum as pure as possible; this image then appears of an intense saturated red, and the red of the spectrum which surrounds it, and which is yet the purest red which the external world can show us, appears less saturated, because it is painted upon the unfatigued portions of the retina: it appears as if covered with a whitish fog.

Let us content ourselves with these examples; I do not wish to accumulate more details, whose exposition would involve us in innumerable descriptions of experiments.

In the presence of these facts, is it possible to suppose, as we are naturally disposed, to, that the qualities of our sensations, and particularly those of our visual sensations, are a representation of corresponding qualities of the external world. Evidenty not. The contrary has been set forth already in the law of J. Muller concerning the specific energies of the senses, a law founded on an observation of the facts. If the rays of the sun are manifested to us under the form of color, or under that of heat, it is something which does not depend upon their intimate constitution; it varies according as they excite the optic nerve fibres or the nerve fibres of the skin. A pressure upon the eyeball, a feeble electric current which traverses it, a narcotic coursing in the blood, may be perceived under the form of light as well as the rays of the sun. The profound differences which exist between the sensations of vision, of hearing, of taste, of smell and of touch, a difference as radical as the sensation of color and of sound, have between themselves no relation of resemblance nor even of dissemblance, the difference depends not at all upon the nature of the external object, but solely upon the central relations of the affected nerve. The question whether, in the domain of each sense, there exists an accord between the objective and the subjective becomes therefore secondary. The colors which the different systems of the ether waves present to us vary certainly with the wave-length of the vibrations of the ether which make an impression on the optic nerve. The system of colors naturally visible enables us to distinguish a series of differences between the different luminous mixtures; but the number of these differences is extremely limited: it is in the ratio of three to infinity. Since the most important faculty of the eye is to measure dimensions in space, and since, in this relation, its organization is much more delicate than that of the ear, we have a right to be satisfied if the eye distinguishes any qualitative differences of light, though very few relatively. The ear, which is much more richly endowed relatively to qualitative differences, is almost incapable of distinguishing anything as it relates to space. Is it not astonishing that in man who, unless he is forwarned, accords full confidence to the testimony of the senses, neither the limits of the visibility of the spectrum, nor the boundaries of the few differences of color which he is capable of perceiving are founded upon anything which has existence outside of the visual faculties? The light may have absolutely the same aspect while being completely different in all its other known physical and chemical aspects.

We find finally, that the pure elements of our sensation of colors, the sensation of the pure fundamental colors, cannot be perceived by the unfatigued natural eye only upon condition of artificially arranging affairs in suitable conditions, and that these colors exist only in the condition of subjective phenomena.

The relation which does subsist between the quality of the external light and that of the sensation may at first sight appear to be but a very little thing, but, in reality, this is perfectly sufficient for an infinite number of the most useful applications. *Identical light excites under the same conditions identical sensations. Light which under the same conditions excites differing sensations of color is not identical.* [To be Continued.]

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Miscellaneous.

(From American Journal of the Medical Sciences.)

Report of Two Cases of Inversion of the Uterus, with Remarks and a Description of the Uterine Repositor.

By James P. White, M. D.,

Professor of Obstetrics in the Medical Department of the University of Buffalo. (Read before the Medical Society of the State of New York. February 6, 1872.)

The *Eighth Case* of inversion of the uterus, which has been treated by me, occurred near Ithaca, Tompkins County, New York.

The following is an extract from a letter received from Dr. H. B. Chase, of Jacksonville, who was then in attendance upon the patient:—

"The case is as follows; Mrs. R., æt. 27 years, of a good constitution, was delivered on the morning of the 25th January, of her first child, after a tedious labour of eighteen hours, when her medical attendant discovered that the placenta was adherent. Severe hemorrhage came on when the doctor separated the placenta from the walls of the uterus and withdrew it with his hand. Immediately (so he says) he discovered a large solid tumour in the vagina, accompanied by still more profuse hemorrhage.

"Four days after the accident I was called to see the patient. On examination I found the uterus completely inverted. The os uteri could be felt at the superior extremity of the tumour. The uterus, at that time, hard and unyielding and filling the vagina. I made an effort to reduce it, but failed. I felt quite sure that reduction was impossible at that time. And now, doctor, the question I would ask is; Can anything be done to restore this poor woman to health and usefulness again?"

My reply to Dr. Chase's inquiry held out the hope that it could, by suitable manipulation, be restored. Accordingly, in compliance with an invitation contained in a subsequent letter, I visited the patient on the 27th of February, not quite five weeks after the accident.

I found her very exsanguine and feeble, constantly losing blood, and at times bleeding profusely. The uterus had not completed its involution, though it was nearly as small and firm as in the normal condition of the organ in the multipara in its unimpregnated state. The perineum had been lacerated during the labour, and the hand could be easily introduced into the vagina and up to the neck of the uterus. The inversion was found to be complete, although the uterus did not protrude beyond the vulva.

The bowels had been, by my direction, freely evacuated the same morning, and, after drawing off the urine, I proceeded to reposit the organ, in the presence of Drs. Chase, Lewis, White, and Carrington and Mr. George Rightmire, medical student, who has furnished a partial report of the case in the *Buffalo Medical Journal* for April 1871. Requesting one of the gentlemen to take charge of the anæsthetic, whilst two others were seated beside the bed, each holding in his lap a foot, supporting with one hand the knee upon his side and holding firmly the patient's hand upon the same side, with her hips brought to the edge of the bed, I placed myself upon my knees and commenced the operation. Carrying my right hand into the vagina, I seized the entire organ and manipulated and compressed it firmly for a short time, to expel the blood and render the tissue flexible. This pressure was continued, with the hand within the vagina, during the entire process. I now commenced pushing upon the fundus, with a large rectal bougie, alternating with the thumb and fingers of the left hand and thus put the vagina upon the stretch. This process, through the attachment of the vagina to the inverted uterus, pulled open the os and reflected it upon the neck. Thus it will be perceived, as I have heretofore described, the process of restoration was from neck to fundus. The fundus was at no time perceptibly dimpled or doubled in upon itself. By continuing this process steadily and gently, occasionally placing the fingers of the left hand over the hypogastrium and through the thin walls of the abdomen, inserting them into the opening os and making traction and pressure, I found the organ passing up through the neck and assuming its normal position. At the expiration of twenty-three minutes from the time of commencing the operation, the uterus was completely restored. The loss of blood was small, and the only noteworthy peculiarity in the case was the doughy *feel* of the organ in this stage of involution. It did not possess the firmness of normal uterine tissue in the unimpregnated state, nor the muscular flexibility of the recently delivered organ; but had a doughy feel like an organ undergoing fatty degeneration. Indeed I am induced to suspect that, at this period after delivery, the uterus cannot be subjected to manipulations without danger of laceration, which would be perfectly safe at a later period, after complete involution had taken place. It is the only case which has fallen under my observation between the third and the eighth week, and the sensations occasioned by pressure and other manipulations were such as to excite apprehension lest the tissues would yield under the fingers.

The patient soon recovered from the effects of the anæsthetic, and I left her, a few hours after, sleeping comfortably under the influence of an anodyne. Since that time she has, under the care of her attending physician, Dr. Chase, gradually convalesced, and is now in "good health."

Case IX.—The following history is taken from notes furnished by J. W. Stewart, M. D., the attending physician:—

"Mrs. E. A., of Port Dover, Canada, æt. 34, was delivered of her second child on the 7th of October 1870 The case for the first seven days I had no personal observation of, but will give a brief history as I learned it from the patient herself and her friends who were attending her, the correctness of which I do not doubt.

"The labour was comparatively an easy one, lasting but three or four hours, and having no pains as usual for a few minutes after the birth of the child. The medical attendant, finding that the placenta was not expelled, made an examination, and said 'it was grown to the womb.' He caught hold of the cord, giving it two or three sharp jerks, and the after-birth came away. The patient, immediately after its expulsion, complained of violent and constant pain, and says she experienced a sensation as if 'all her insides had dropped down.' In a few minutes she began to sink, being bathed in cold perspiration, pulse running very rapidly. Her friends, being alarmed, asked the doctor what was the matter? He replied she was dying. After a time she rallied, but remained in excruciating agony up to the time I saw her—the eighth day after confinement. At my first visit I found her in the following condition: Tongue deeply furred; very irritable and feverish; pulse 155 to 170, very angular and weak; abdomen much swollen and so tender she could not bear the clothes to touch her. In a word, I found her labouring under a violent attack of metritis, the inflammatory action extending over the whole surface of the peritoneum. I learned that these symptoms had appeared three days previously, hourly growing more intense. I removed her bandage immediately, and applied turpentine stupes and warm fomentations, giving her large and repeated doses of opium.

"By my advice Dr. C. W. Coventer was called in the same evening and the next day. She described to us so accurately the symptoms of inversion of the uterus, taken in connection with the history of the case and her strange feelings, that we suspected the true state of affairs, and suggested an examination. This she positively refused, saying she 'was so weak and tender it would kill her,' and we were compelled to postpone it till the next day. The next morning I found her better, and the whole surface of the abdomen terribly blistered from the free use of turpentine. The inflammation and swelling were subsiding rapidly, and I insisted on making an examination; when I found the uterus inverted, and almost protruding from the vagina.

"Continued the warm fomentations, keeping her thoroughly under the influence of opium, with quinia, beef-tea, &c. &c.

"In a few days she improved wonderfully, and in two weeks we considered her strong enough to bear the operation, and attempted its reduction. We first brought her under the influence of chloroform, and then introduced the hand into the vagina, trying to reduce it by a kneading process with constant pressure. We succeeded so far, after two hours' constant labour, as to get the fundus even with, if not a little inside of, the os. We tried to keep what we had gained by inserting and inflating gutta-percha balls, which we had procured for the purpose. Next day she appeared to suffer very little from the operation; but the India-rubber balls did not come up to our expectations, so the womb had dropped back nearly into its former position.

"About eight weeks after, we made a second attempt, but the result was less favourable than the first. I forgot to mention that, about midway between the first and second operations, she had another violent attack of inflammation without apparent cause."

Upon receiving an invitation from Dr. Stewart, I visited the patient on the 11th of March, 1871, nearly six months after the inversion. I found the woman very prostrate and anæmic, and suffering from constant copious leucorrhœal discharges, and frequent hemorrhages. The uterus was completely inverted, with its fundus just within the vulva, and having fully undergone the process of involution. It was now as hard and firm as in the normal condition in the multiparæ. The bowels, by my direction, had been freely evacuated before my arrival, and I preceeded at once to make an effort to reposit it.

Placing her in the same position as heretofore described—upon the side of the bed, with her feet supported by Drs. Coventer and Salmon, I assumed my usual position upon my knees. Dr.Stewart, her family physician, was charged with the administration of the chloroform, and requested to produce profound anæsthesia. The first few minutes were chiefly occupied in compressing and moulding the uterus, rendering its walls more flexible, and in gently pressing up the organ so as to put the os upon the stretch and commence its dilatation. At this time the *uterine repositor* was introduced into the vagina, and its disk placed in contract with the fundus, and firmly held there by the intra vaginal hand. The outer end of the instrument was placed against my breast, on the same level with the uterus. By means of the large circular spring, it readily kept its place, and left the other hand free to be used above the pubes to assist in forcing open the dilating os, which could be plainly felt through the abdominal walls. The spring at the outer end of the instrument enabled me, without danger of lacerating the tissues, to keep up a constant gentle pressure upon the fundus, and by leaning forward, to increase this pressure intermittingly. The force was exerted more directly upon the fundus by means of the repositor than was possible by the thumb or fingers, or by the round end of the large bougie. Pressure made through this spring is made more continuous than when made by the hand, and far less likely to lacerate the tissues. It was the first time I had used it, and I was delighted to find that it gave me a third hand, *which did not become fatigued*, and permitted me to use the left hand in manipulating the os in the hypogastrium; while the right hand easily held the instrument in contact with the fundus, and firmly grasped that part of the uterus not yet reflected, and remaining in the vagina. At the expiration of an hour and ten minutes, considerable progress had been made in reflecting the os down upon the body of the organ, when the patient seemed in some danger from the chloroform, and the process was for a short time suspended. The windows were thrown open, a little brandy was given by Dr. Hayes, who was present, and in a short time it was again deemed safe to resume the operation. Remaining continuously in the same position, I resumed pressure upon the repositor, holding, with my left hand, the anterior reflecting surface of the uterus which extended further and further up into the abdomen. In one hour and twenty-three minutes from the time of taking my position, I had the pleasure of announcing that the organ was completely restored. As my associates had previously made much longer efforts, under circumstances much more favourable, they were at first incredulous, but soon verified my assertion instituting, at my request, a careful examination.

Placing the patient comfortably in bed, and giving a full dose of morphia, she slept well that night, and I left her next morning feeling quite comfortable, and delighted with the prospect of being again restored to health and strength.

Nothing remarkable occurred during her convalescence, which, though slow, was uninterrupted, "riding out" during the month of April; and in the course of the summer, she regained, I understand from Dr. Stewart, her "usual health."

Remarks.—These two cases complete a series of nine cases of inversion, varying in duration from a few minutes to fifteen years after its occurrence, which have been reduced, by the writer, by manipulation of a single effort. The first case was reported to the Buffalo Medical Society in February, 1856, and was of only eight days' standing. After giving a full account of the case, which was published in the *Buffalo Medical Journal* of March, 1856, the writer concludes with the following remarks:—

> "This case is regarded as interesting in many respects. It will encourage the growing belief among accoucheurs that reduction may be undertaken with reasonable hope of success, at a period much later than most writers have heretofore advertised."

In the same article, alluding to a case of fourteen days standing which had fallen under my observation in 1842, and in which no attempt at restoration was made, it is added: "With my present views upon this subject, I should abandon such a case as hopeless only after a long effort at reposition."

Fully convinced, from the result of the efforts made in this instance, eight days after inversion, of the feasibility of restoring the uterus in many cases heretofore considered irreducible, I did not meet with an opportunity of putting my convictions again to the test until the 12th of March, 1858, when I visited Mrs. M., near Hornellsville, who had been confined on the 22d of September previous, almost six months before; and after about one hour's continuous effort, succeeded in repositing the inverted organ. A full account of this case, with plates, and a description of the manner in which reduction was accomplished, was published in the July number of the *American Journal of the Medical Sciences*, for 1858. Permit me here to crave indulgence for one word in relation to priority in this operation. It is true, that Tyler Smith published his case April 24th, 1858, in the *London Medical Times and Gazette*, forty-two days after my operation in Hornellsville, and more than two months before the report of the case made its appearance, in the *American Journal of the Medical Sciences*. But I submit, that, more than two years before, I had taken the initiative, and published my views and hopes. And I also insist that his subsequent success in April, 1858, could hardly have been known in this country on the 12th of March preceding, which is the date of my second operation. Upon this point I trust I shall be pardoned for gratefully quoting the following passage from the able article on this subject from the impartial and distinguished Professor of Obstetrics in the University of Louisville.

> "Before I proceed to do this [give an account of the method of manipulation pursued by Dr. White], it is meet that I should pay a tribute of honour to our countryman, Professor James P. White, who has not received the credit he so well deserves, for his leadership in the revolution of gynæcological practice, which he inaugurated. Even a superficial reading of his report[1] must satisfy any one that he regarded himself as a pioneer in his attempt to reduce, by the taxis, chronic inversion of the uterus; and that he was wholly unconscious that such a surgical feat had been performed either at home or abroad. Neither had it been so much as thought of at home, much less performed, nor had it been performed abroad in such a way as to attract professional attention or inspire confidence in it, until Dr. Tyler Smith, of London, published a case of twelve years' duration in the *Medical Times and Gazette*, April 24, 1858, which of course could not have been known to Dr. White, whose case was successfully treated on the 12th of March immediately preceding, though not published until July following, the earliest time that it could be published in a quarterly journal."[2]

On the 24th of August following, in the presence of Professors Austin Flint, Sen. and Jr., and Professors Thomas F. Rochester and Mason, I reduced an inverted uterus of over fifteen years' duration. This was accomplished in about fifty minutes and with less difficulty than those of six months. It should be stated, that the patient died on the sixteenth day after the operation, though it does not follow that her death was a consequence fairly chargeable to it.

An account of this case, as reported to the Buffalo Medical Association, will be found in the *Buffalo Medical Journal* for October, 1858, and from which the following paragraphs are cited:—

> "She improved rapidly, with no untoward symptoms during the succeeding eight days, and at the end of that time considered herself perfectly well. On the morning of the ninth day, however, after returning from breakfast, she imprudently strained considerably at stool, and was suddenly seized with violent pains in the abdomen. She was at the same time startled by the coming in of a friend whilst she was on the vessel. The mother and husband had left her a day or two before, considering her perfectly well. She immediately went to bed, sent for me, and died on the seventh day after of peritonitis."

In commenting upon the report of this case in the Association, Professor Austin Flint, sen., holds the following language:—

> "I was present at the reduction of the uterus by Professor White, and also at the post-mortem examination. The reduction was effected with great ease, and under the moderate use of chloroform. He (Professor Flint) regrets, equally with Dr. White, the unfortunate accident which resulted in the death of the patient. The connection between the peritonitis and the operation did not seem to him to be very close; otherwise it would have supervened sooner. He did not think that it at all invalidates the success or propriety of the operation. The result will, perhaps, be thought to have more connection with the

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[1] Alluding, doubtless, to the case of 1858, and never having had his attention called to the one of January, 1856, reported in the Buffalo Journal more than two years before.

[2] Thoughts on Chronic Inversion of the Uterus, specially with reference to Gastrotomy, as a substitute for Amputation of the Uterus. By Henry Miller M. D. Richmond and Louisville Medical Journal, April, 1870, p. 14.

> operation from an ordinary perusal of the case, than really exists. But a careful review of all the circumstances seems to show that the peritonitis was merely an unfortunate accident," &c. &c.
>
> Professor Rochester said, "there were some points which had not been sufficiently dwelt upon by Dr. White or Dr. Flint. The appearance of the uterus, on examination after death, plainly indicated that no undue amount of force had been used in the operation. . . . In regard to the occurrence of peritonitis, he thought that it was a most unfortunate accident. Three-fourths of the cases which he had seen occurred at this season of the year. There was no doubt but that the exhausting nature of the difficulty under which the patient had laboured for so long, made the system more susceptible to the disease, and much less able to resist it. There was nothing in the appearance of the parts which would lead to the suspicion that the peritonitis commenced on the uterus; that it appeared to be a simple case of the disease. The greatest pain was referred to the epigastric region, and it was probable that this was its origin."

This case, of fifteen years, was much more easily reduced han the ninth case, just reported, and I am convinced that the opinion long since published by the writer that the difficulty of reduction is "as great immediately after complete involution, as at any subsequent period, however remote," will be found to be correct. I fail also to perceive why the *dangers* should be greater in consequence of delay, and hence my anxiety to prevent any erroneous conclusions upon that point which might be hastily drawn from the fact that this case terminated fatally, whilst those of six months recovered. The uterus, it is well established, completes the process of involution in from eight to twelve weeks. Judging from the cases of eight days, twenty-one days, and thirty-five days, and the eighth case just reported, it is, in my opinion, far more likely that it will be found by careful subsequent observation that the tissues are more susceptible to laceration from the necessary manipulations, during the latter part of the period of involution, than at any other time. As intimated in the report of this, the eighth case, which was between five or six weeks after labour, the impression in handling the uterus was that it would be easily torn. It is, during this change, neither muscular and flexible like the recently delivered uterus; nor firm and elastic like the unimpregnated organ. It will, I suspect, be found safer, in view of this condition, after about the twentieth day, to wait for the completion of this process, notwithstanding the increased difficulties of the operation occasioned by such delay.[1]

Observation and careful reflection—based upon the cases which have been committed to my charge, now numbering nine in all, varying, as already stated, in duration from a few minutes to fifteen years—confirm me in the opinion expressed in 1858. Indeed, my convictions are very decided, and I am incredulous as to the necessity of ever resorting to amputation, or the still more objectionable operation of gastrotomy. True, it may not always be reduced at a single sitting, as in all which I have encountered, but by means of the repositor, uniform and gentle pressure can be continued until the os is fully dilated, and the fundus pushed up through it. The insurmountable difficulty heretofore has been supposed to consist in our inability to maintain uniform and persistent pressure for a sufficient length of time. The hand soon became fatigued, and another hand, even of the same individual, could not be substituted without losing a part of what had been gained. This loss was increased when the hand of a fellow practitioner was introduced to continue the operation. No doubt great physical endurance, being able to maintain one position for a great length of time, has been an essential element in success. The various substitutes which have heretofore been resorted to for continuing pressure, where the operator became exhausted, have utterly failed. The elastic bags, mentioned in the last case, used by Dr. Stewart, are a fair illustration of their inefficiency. They press more upon the large surfaces anteriorly and posteriorly situated, and with which they are in contact, than they do upon the fundus, which has no firm ossific base of support, as have the rectum and bladder. The uterus ascends very soon, owing to the yielding nature of the vagina, and escapes from the reach of the distended vaginal bags.

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[1] Pages 102 and 103, Lectures by Priestley, on the subject of the involution of the uterine parietes, says: "With the advance of the fatty transformations the uterus becomes, in a corresponding degree, friable, and continues so until it has completely returned to its usual condition. I have occasionally seen at the post mortem examination of women, who had previously borne children, the uterine tissue affected by fatty degenerations, and so soft and friable that a sound passed into the uterine cavity might be readily pushed through the uterine walls.

The repositor, when it is deemed better to proceed in a more gradual manner, or when it may be found impossibte to reduce it at a single effort, can be received with the uterus into a large cylindrical speculum, and by means of a T-bandage, can be made to press directly upon the fundus until the os is gradually dilated and all resistance overcome. By means of the large spring at the outer extremity the amount of pressure can be graduated to an ounce. The disk will follow up the fundus by means of this continuous elastic pressure until it disappears in the os and neck. Any intelligent assistant can be trusted to increase or diminish the pressure during the abscence of the practitioner, as the exigencies of the case may demand. The pressure which the repositor can be made to exert is equally as gentle and far more persistent than the tent of sponge or sea-tangle, or the wedges of Barnes, when applied to dilate the os for the purpose of examining the cavity, when the uterus is in its normal position. These are the views expressed fourteen years since, in the article in the *American Journal of the Medical Sciences*, already alluded to. The following passage occurs :—

> "We are all aware that the os and neck of the uterus may, by sponge tents and other mechanical contrivances, be widely dilated when the womb is in its natural position and of ordinary size. This dilatation is frequently made by those who are extensively engaged in the treatment of uterine affections for the purpose of perfecting diagnosis or instituting treatment. Of the susceptibility of these parts to be thus dilated, and that, too, without much risk of injury to the tissues involved or the general health, no one at all familiar

with the subject will deny. What is the relation of parts in inversio uteri? Is not the vaginal sheath, which in the normal arrangements of parts was attached to the outside of the neck of the uterus, now, in the inverted state, firmly attached *within* the cavity of the canal of the neck of the uterus just at its orifice? The vaginal canal is securely attached at its lower extremity at or near the outlet of the pelvis, and, whilst it is very elastic, is less yielding in its longitudinal than transverse diameter, and not easily lacerated or detached from its connections, unless irregularly pressed as by a pointed instrument. Force or pressure, applied to the fundus of the inverted uterus, is resisted by the upper extremity of the vagina, which is now fastened upon the inside of the neck. The lower extremity of the vagina, being firmly attached, cannot yield, and the inevitable result must be the pulling open the mouth of the uterus, unless the tissues are lacerated before that part dilates. Can there be any greater difficulty or danger in *pulling* open this outlet than in *pressing* it open if performed with the same gentleness?

"The uterus and vagina in complete inversion represent a continuous bag or sac, doubled or reflected upon itself, with the open extremity of the sac securely fixed Pressure upon the closed end of the bag will, it is plainly perceived, under such circumstances, result in straightening the bag by completely turning it the other side out. So with the parts concerned in inversion. Pressure upon the fundus, if well directed, pulls open, first its mouth, then its neck, and finally, if persevered in, doubles the body upon itself also, and carries the fundus through the os and neck and body to its normal position.

"Does any uterine pathologist believe it would be impossible safely to dilate the os and bring down the fundus of the uterus—completely inverting the organ—if carefully and perseveringly undertaken? If affirmatively answered, then why may we not pull open the neck by means of the vagina in the same gentle manner as we would press it open when in a normal position, and thus carry the fundus up through it by means of pressure upon that part when it is in a downward direction? Perhaps I may be too sanguine, but I am inclined to believe that well-directed pressure upon the fundus, if continued long enough, will in all cases, where there are no adhesions, result in restoration or reposition, no matter how much time may have elapsed since inversion occurred."

Subsequent experience has but served to confirm the views then advanced. With the repositor, as before described, pressure is brought directly upon the fundus and maintained for any length of time desired and with such an amount of force as shall be deemed entirely safe. The uterus can only escape in an upward direction, and restoration must follow. Nor will it be more painful when thus dilated than when the os is dilated by tents. I am of opinion that all cases of inversion *can* be reduced, without qualification as to their duration.

This opinion does not, however, seem to have been generally adopted by writers upon the subject, since these views were published, and hence it is deemed important to urge them upon the consideration of gynæcologists.

It is true, there are a few exceptions to this lack of faith. In an able "Report on Inversion of the Uterus," made to the New York State Medical Society, by appointment by Prof. J. V. P. Quackenbush, at its annual meeting in February, 1859, we find the following emphatic endorsement of the feasibility of reduction. After giving a very clear account of his theory of the causes of this accident, he says:—

> "But whatever may be the manner of its occurence; the proper treatment is what most demands our attention. And what is the proper treatment of inversion of the uterus? I answer, reduction. If the case be recent, reduction; if of twelve days' duration, reduction; if of twelve years' duration, reduction! At any time, and under all circumstances, reduction must be resorted to, and very few cases will be found which are not irreducible. I lay much stress upon this subject, for I do not think it well understood" . . . Again, after referring to the opinion of Meigs when he says, "you have no art or skill or no power equal to the performance of such a miracle of surgery as that" (the reduction of a case of inversion of six months' duration), Prof. Q. adds, "gentlemen, this miracle has been done, and can be done, and should be done, and with proper management no case need be abandoned."

Notwithstanding this unhesitating affirmation of the doctrine of the feasibility of reduction in all cases of chronic inversion, which I had enunciated nearly two years previously, we find men in this state holding to the old doctrine that reduction is exceptional, and not by any means to be expected. The late Prof. Bedford, in his *Principles and Practice of Obstetrics*, Fourth Edition, 1868, uses the following language:—

> Should every effort *fail*—and such. in the most skilful hands, will not *unfrequently* be the case—care should be taken to return, if possible, the tumour within the vagina, and retain it *in situ* by the India-rubber pessary, &c.&c.&c.

Nor is this incredulity, or want of progress, confined to this country. In England, where Tyler Smith had reduced a case of twelve years' standing, and published it in April 1858, expressing the opinion "that no case, with proper and prompt management, could be considered irreducible within a reasonable time after the accident," we find Dr. Meadows, in his *Manual of Midwifery*, published very recently, using the following language: "When the case has gone on unrelieved for many weeks, or even years, though attempts should always be made to secure reduction, &c. &c., yet the chances are *very greatly against success*," &c. &c.

Again, Courty, in his work published in 1866, in Paris, and who may be considered a fair exponent of the views in his own country, refers to reduction as being exceedingly doubtful. Indeed, he describes a method of reduction of his own which his reviewer, in the *American Journal of the Medical Sciences*, thinks "especially worthy of consideration and trial." This consists in passing two fingers into the rectum and by depressing them into the anterior wall of the rectum, hooking them into the ligament on each side of the neck, and thus holding it down whilst, with the other hand, pressure is made upon the inverted portion of the organ, &c. &c. Again, he adds: "If the reduction is impossible, it is necessary to resort to palliative treatment or to *extirpation* of the uterus for its radical cure."[1] Nor are our German friends more hopeful. In a work by Dillenberger, republished in London, in 1871, he says: "Chronic inversion is held to require palliation; if that is vain, removal by ligature or excision."

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[1] Page 80, Paris edition, 1866.

Whence this want of confidence? The cases of reduction are now so numerous, and the operation of such demonstrable character, as not to admit of doubt.

I am utterly unable to account for this unbelief. Mere duration, I must repeat, cannot militate against success after the first three or four months have elapsed. And I am entirely incredulous as to there being such adhesions between the walls of the uterus as to withstand long-continued gentle pressure. Force may be as gradually applied by means of the repositor and speculum, as the operator may deem necessary for the safety of the patient. When the os has been thus carefully dilated, the hand of the operator, or, if the fundus has passed up into the neck, a large rectal bougie, can be called in requisition to complete the operation. Indeed, I indulge the hope that the day is not distant when all cases of inversion of the uterus will be regarded by all intelligent practitioners as amenable to treatment.

Perhaps something should be said here in relation to the manner in which reduction is accomplished. There seems great and unnecessary ambiguity and confusion on this subject. In all recent cases the fundus can be pressed into the body and neck, or "dimpled," as it is termed, by pressure upon the most depending part. In this manner, I am certain, the two cases which were reposited immediately after delivery and, to some extent, the one of eight days' duration, were carried up. In the case of Dr. Lockwood, in 1861, the womb had been inverted for about forty minutes when I arrived. Administering some paregoric and brandy to restore her from the collapse, I seized the uterus, pulled off the partly adherent placenta, and passed my hand, with the fundus before it, up into the cavity of the abdomen with scarcely more difficulty than would be encountered in inverting a wet bladder. Retaining my hand there for a short time, contraction soon came on under the influence of the ergot and stimulants which were given, and the patient [Mrs. W.] made a good recovery, and has since borne children. So with the one at eight days; in the report, it is stated, "having succeeded in 'dimpling' the fundus, pressure was maintained with the thumb at that point until the hand became nearly powerless. To preserve this depression whilst the muscles of the hand were permitted to rest, a rectal bougie, about twelve inches in length and one in diameter, was carried along in its place, fixed in the dimple, and pressure unintermittingly continued through it, by the left hand outside the vulva. Gradually the concavity of the fundus was found to be deeper until it finally became completely restored." This is doubtless the manner in which reduction takes place in all recent cases, whilst the organ is large and the walls flexible, and I was led into error by it in supposing that this same method obtained in all cases. This delusion was dispelled in my next case, of six months, in the report of which it is said in relation to the manner in which reduction was affected: "There can be no doubt that the os first commenced to yield and pressed down upon the intra-vaginal hand, which, it will be recollected, inclosed the entire uterus and the upper extremity of the bougie and kept them in contact. This part gradually dilated and passed down upon and over the neck, which in turn dilated, and doubled down upon itself. The fundus did not perceptibly dimple, or was not reflected upon itself during the operation. The organ was too firm and the cavity to small for any depression to be made upon the walls of the fundus."

I have nothing to change in this description of the *modus operandi* of reposition in chronic inversion. In the case of fifteen years the attention of the distinguished gentlemen who were present was called to this fact [the reflection of the os upon the neck], and they were requested from time to time to pass a finger up beside the hand of the operator and verify this point. The same careful observation was made during the most difficult of all the cases of reduction which I have encountered, the one at Port Dover, and with the same result. In my opinion, it would be unwise to double in the fundus upon the body after complete involution, even if it were practicable to do so. By so doing you would increase the size of the tumour to be carried through the cavity of the neck and os, by this intro-flexion, and also increase the difficulties of reduction. But all who make the effort to dimple the fundus of the unimpregnated uterus into the cavity, will perceive that it is impossible to effect reduction or inversion in this manner, even upon the dead subject.

By this explanation can all the apparent discrepancies as to the manner or reduction be reconciled. One practitioner has operated upon a recent case and restored it by dimpling in the fundus, whilst his no less observing and truthful fellow has restored the involuted organ by reflecting the os over the neck and body without at all being able to depress the fundus, and hence the difference.

Never having had a case of inversion occur in my own practice, I have never witnessed it, and shall not occupy space with any theory as to the cause and manner of its production.

The following figures represent the uterine repositor and its mode of application :—

UTERINE REPOSITOR.

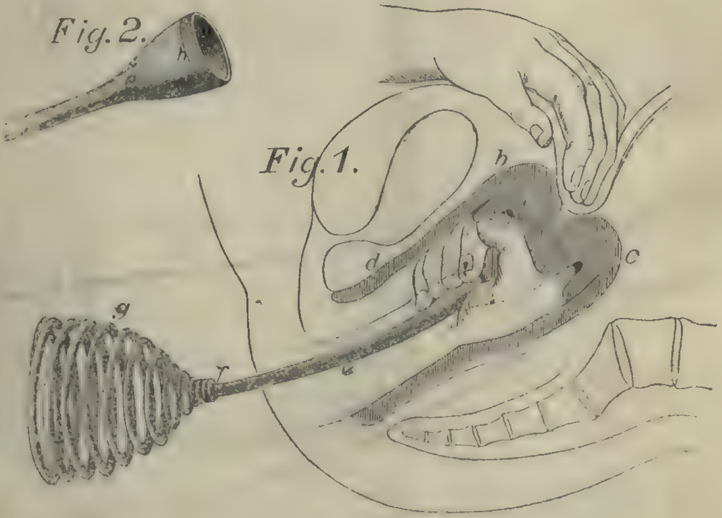


Fig. 1.

- *a.* Uterus in process of reduction.
- *b.* Anterior lip or wall of the uterus with the fingers of the left hand pressing upon it and assisting in pulling open the uterine cavity.
- *c.* Posterior uterine wall semi-reflected.
- *d.* Anterior vaginal wall.
- *e.* Wooden or hard rubber stem of Repositor, its enlarged extremity held in contact with the fundus by the intra-vaginal hand of the operator.
- *f.* Distal extremity of stem made into a screw, so as to fasten into *g*, a coil of No. 11 steel spring wire, requiring eight or ten pounds pressure by the breast of the operator, against which it is placed, to bring it down.

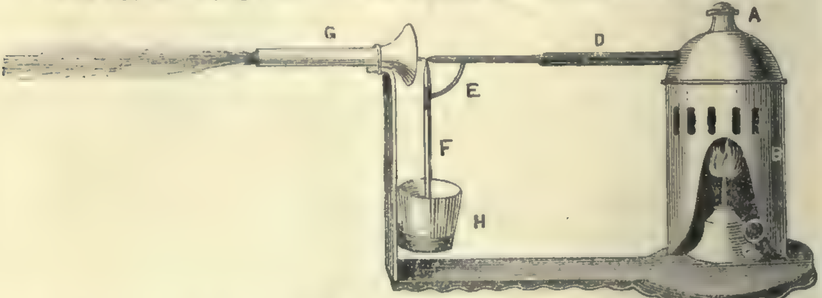
Fig. 2.

- *h.* Uterine extremity of stem *e*, which is terminated with a soft india rubber disc 1⅜-inch diameter, the concavity into which the fundus is received being about one-half inch deep, with its terminal margin thin and soft.

A new method of applying Steam to the middle ear and of inhaling medicated vapor with a new STEAM ATOMIZER.

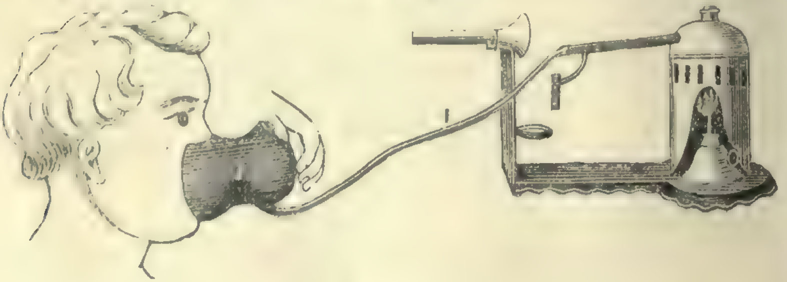
"Inhalation has been employed from the earliest ages. It was used in Greece, in Rome, in Arabia, and from thence, with the extension of medical knowledge, it spreads every where, until finally the recent discovery of a method of subdividing liquids into a cloud or spray, and thus utilizing them to the purpose of Inhalation, has at once enlarged its sphere of usefulness, and given a fresh impetus to the study of the Therapeutics of Inhalation.

This Apparatus (Fig 255) consists of a nickel plated boiler with safety valve



A resting on a body B ; the lamp C which heats the boiler : the metal arm E which holds the glass tube F ; the arm D of the boiler into which the arm E is slipped ; the medicine glass H ; and the face shield G. This face shield of glass is flattened its *whole extent* which allows it to be introduced farther into the mouth, and presents gagging ; and other unpleasant symptoms, which the round face shields are liable to produce. This atomizer is the most durable of any now offered to the profession. The boilor is nickel plated, and the body and shield holder are of polished brass, and consequently they will not rust or be affected by heat as readily as those made of iron. The glass tube F is arranged to slip into the arm E and is easy of adjustment or removal. If the straight glass tube should be broken, it can be replaced at one-sixth the cost of the right angled tubes used on other Atomizer's ; or a tube may be formed by drawing out a piece of glass tube in the flame of a spirit lamp or gas flame, and then dividing it by a slight scratch with the blade of a knife. In this way you can obtain a supply of tubes without being compelled to send to the manufacturers for tubes of a peculiar shape.

Fig 256 shows the atomizer with the glass tube removed, and a flexible

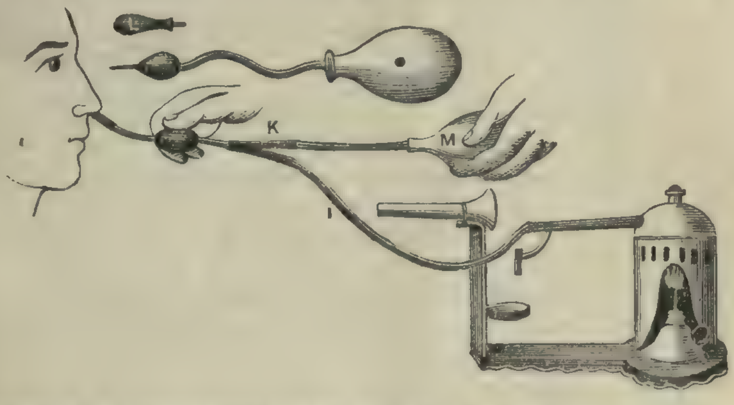


rubber tube attached to the point E connecting the boiler with the hard rubber face shield I. This shield has a chamber for the purpose of holding sponge, which can be medicated with any drug desired. If necessary reduce the flame of the lamp so as to maintain a low pressure of steam in the boiler. The steam passing from the boiler through the flexible tube into the face shield, and through the sponge, produces a warm steam or medicated vapor. It is so simple that a child can administer it without any trouble and is the surest and most convenient way that has been employed for administering warm steam or medicated vapor, as the face shield covers up the nose and mouth, and has an opening in the top for the exhalation and inhalation of the air, (the opening can be closed with a cork if desired). By this means the patient is compelled to inhale the steam or vapor.

Formerly when it was necessary to administer steam to children, the means employed was either, to stick a hot poker into a pail of water, and hold the child over it to inhale the vapor; or to hold the child up to the spout of the croup kettle to let it inhale, if it would, the escaping steam, very little of which entered the childs throat.

Sometimes the child would close its mouth, and inhale through the nostrils, in which case the steam could not enter the throat. but would condense before it reached it. The importance then of having an efficient apparatus is self evident. This apparatus will be most valuable in the treatment of Croup, Diphtheria, Asthma, Whooping Cough, etc.

Fig 257 represents the face shield removed, and Dr. D. B. St. J. Roosa's apparatus for blowing steam into the middle ear, substituted.



There are certain diseased conditions of the middle ear, in which the lining mucous membrance is thickened and somewhat sunken, the normal secretion of mucous is lessened or apparently absent: even the Eustachian tubes sharing in the geneaal thickening, and dryness perfectly pervious and permitting the free movement of air through them, known as Chronic Aural Catarrh of the variety is called Sclerosis. Tinnitus aurium is an irregular symptom of the disease, but often present and often distressing.

Catheterization and inflation after Politzers method sometimes improve the hearing slightly, more often not at all; neither does it improve the Tinnitus. Such cases are discouraging. It seems reasonable to infer that in such cases some application to the comparatively dry surface of the tympanic cavity which shall increase the amount of secretion, would prove a step in the right direction, toward reestablishing those conditions which are demanded by the laws of sound. Such an application is moist heat. It seems reasonable to expect from the use of steam some improvement in that distressing and obstinate symptoms, Tinnitus aurium, (which is caused by the irritation of the auditory nerve) because of the admitted sedative effect of moist heat.

In treatment of the diseases of the tympanic cavity, its condition of moisture or dryness should be considered on account of its relation to the acoustic requirements of the hearing apparatus, and when dryness exists, our therapeutic efforts should tend to reestablish the normal secretion, while on the contrary, astringent remedial agents are in place only when there is hyper secretion. The application of steam will reestablish the secretions in the abnormally dry tympanic cavity, and place the stretched membranes under more favorable acoustic conditions, and thus improve the hearing, while through its sedative effect the irritated auditory nerve becomes quiet. Steam is applied in the following manner. The face shield I is removed and the Y shaped glass tube attached to the extremity of the flexible tube I. The soft subber bulb M is attached by a flexible tube to the opposite arm of the Y. To the remaining arm is attached Dr. Roosa's hard rubber apparatus. The steam passes from the boiler through the flexible tube I and the apparatus, which contains a piece of sponge. The extremity of this apparatus is inserted into the end of a hard rubber Eustachian catheter, already in the patients mouth.

Compress the rubber bulb M. This forces the steam through the Roosa apparatus and the Eustachian catheter into the middle ear. The pressure upon the bulb must be made quickly, and the point must be removed from the end of the catheter after each compression. If these directions are observed, no inconvenience will be felt by the patient, and there will be no possible danger of exciting inflammatory action in the pharynx; but if the pressure is made slowly, the prolonged contact of the steam is likely to produce an unpleasant feeling to the patient, and there is some danger that it may escape into the pharynx and provoke inflammation. The sponge in Dr. Roosa's apparatus prevents drops of water from being carried into the internal ear with the steam. The small hard rubber point can be unscrewed, and the nasal tube substituted when it is desired to blow steam through the nose, or the whole can be detached, and Dr. Roosa's modification of Politzers apparatus formed for inflating the middle ear with air.

This apparatus is manufactured by Shepard & Dudley, 150 William St., N. Y.

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Editorial.

OBITUARY.–Died at Nicolaus, SutterCo., Cal., Feb'ry 25th, Dr. Chas. Weston, late Surgeon U.S.A. Dr. Weston was born in Charleston, May 20th, 1840, and graduated in Jefferson Medical College, Philadelphia in 1861. He then commenced practice in that city, but shortly after was commissioned as Surgeon in the U. S. Service. He received a wound in the region of the heart, while in discharge of professional duties, from a shell thrown into the hospital. The Doctor came overland to California in search of health, and so far regained it as to be able to resume the practice ot his profession, to which he has ardently attached, and in the active duties of which he continued to within three days of his death. When conscious of his approaching end, he arrranged his business for the event, and suddenly expired in the arms of a friend, of whom he had requested to be raised up in bed. He leaves a devoted wife to mourn his death, and the community while they sympathize with her, also feel their loss in an able and beloved physician.

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AMERICAN MEDICAL ASSOCIATION.—The minutes of the late session are now in press, and will shortly be issued in pamphlet form. Physicians can obtain them of the Secretary Wm. B. Atkinson, 1400 Pine Street, Philadelphia. Price 50 cents.

Books Reviewed.

Can Chloroform be used to facilitate Robbery? By STEPHEN ROGERS, M. D. President of the New York Medico-Legal Society. Reprint from Journal of Psychological Medicine.

In this pamphlet, which constitutes a paper read before the New York Medico-Legal Society, Dr. Rogers gives an account of many of the cases of Robbery, etc., said to have been performed with the aid of chloroform. Many of the cases seem to be simply willful deception on the part of those robbed, others arise from ignorance of the properties of chloroform; while not a few are chargeable simply to exaggerated rumor or report. Dr. Rogers' paper is an able criticism on the reported cases of Robbery with the aid of chloroform. In conclusion he challenges the production of proof in one single instance of the successful use of chloroform on the human subject to facilitate Robbery.

Transactions of the American Ophthalmological Society. Eighth Annual meeting. Newport, July, 1871. New York: D. APPLETON & Co. 1871.

The transactions of this Society are full of interesting and valuable matter. Dr. Jeffries gives an interesting and exhaustive report on the progress of Ophthalmology, in which he pays a short and deserved tribute to Von Graefe and other noted Ophthalmologists who have recently died. The whole Volume is full of interesting papers and shows that the society is fully awake to the importance of its mission.

Eating and Drinking; a popular manual of food and diet in health and Disease. By GEORGE M. BEARD, M. D. New York: G. P. Putnam & Sons, 1871.

Stimulants and Narcotics. Medically, Philosophically and Morally considered. By George M. Beard, M. D. New York, G. P. Putnam & Sons, 1871.

These two little books form numbers three and four of Putnams handy book series, and are composed of matters of interest to the popular mind, which are not usually treated of in the literature of the day.

Eating and Drinking, gives a history of the different kinds of food, and their character, the manner of preparing them, together with rules for diet in health and disease. Stimulants and Narcotics, is the title of a little work which treats those subjects in all their varied points of view. Intemperance and the various means proposed for its cure are considered to some length; and are of much interest to the practitioner as well as to the general reader. The concluding sentence of the book. "The future of Temperance must inevitably share in the future of civilization" expresses the true idea in regard to the subject. Educate the people to higher and nobler aspirations and there will be less intemperance.

Plain Talk about Insanity: its causes, forms, symptoms, and the treatment of mental diseases. With remarks on Hospitals and Asylums, and the Medico-Legal aspect of Insanity. By T. W. FISHER, M. D. Boston: ALEXANDER MOORE, 1872.

This book comprises some very interesting "Plain Talk" in regard to Insanity which will be as valuable to the professional, as to the non-professional reader for whom it is principally intended.

The task of writing a book on any subject, strictly professional in its character which will be adapted to the popular mind, is one of considerable difficulty. In none of the many recent works of this character have we seen this task better accomplished than it has been by Dr. Fisher.

The causes, forms, symptoms, and treatment of insanity are each considered under its appropriate head, the Medico-Legal aspect of Insanity is treated of to some extent and a number of illustrative cases cited. Much of the matter for this portion of the work is derived from Dr. Ray's work.

Although some of the terms used would perhaps be unintelligible to non-professional readers, yet the work as a whole is of much interest and deserves a large circulation.

Animal and Vegetable Parasites of the Human Skin and Hair. By B. JOY JEFFRIES, A. M., M. D. etc. Boston: ALEXANDER MOORE, 1872.

The person who seeks in this little book a full and complete treatise on Animal and Vegetable Parasites of the human body will be compelled to turn away disappointed, but he who seeks a work on this subject suitable for the popular reader, and suggestive and instructive to the physician will find his want supplied.

The author speaks in turn of the different kinds of parasites and gives plain and concise directions as to the steps to be taken to get rid of these troublesome pests.

An Introduction to Pathology and Morbid Anatomy. By T. HENRY GREEN, M. D., Lond. Illustrated by numerous engravings on wood. Philadelphia: HENRY C. LEA, 1871.

In his Preface the author modestly disclaims any other title for his work that of an Elementary or Introductory work in morbid Anatomy; yet a cursory examination would seem to indicate that, although it does not reach the high standard of the work of Rindfleisch, still it possesses to considerable extent the requisites of a Text Book of Pathology.

The Book is devided into thirty-nine chapters and treats each subject in the order introduced clearly and to as full an extent as could be expected of a work of this character. The increasing importance which is being attached to the study of pathology calls for a work of this kind to prepare the student for the works of the masters. The illustrations, many of them are familiar being taken from Rindfleisch's work; yet not a few of them are original being taken from specimens in the author's possession. We know of no work of its character which we would sooner place in the hand of the student commencing the study of Morbid Anatomy.

Pulmonary Consumption: its Nature, Varieties, and Treatment. With an analysis of one thousand cases to exemplify its duration. By C. B. J. WILLIAMS, M. D., F. R. S. etc. & CHARLES T. WILLIAMS, M. A., M. D., Oxon. Philadelphia: HENRY C. LEA, 1872.

The large experience of Dr. Williams in the treatment of Pulmonary disorders has enabled him to place in the hands of the profession a work which is in many respects superior to any work of the kind which has fallen under our observation. The labor which was necessary in the arrangement and analysis of the vast number of cases which are spoken of in this work must have been enormous and the profession owe to Dr. Williams and his son many thanks for their untiring zeal and devotion in the cause of Medical science. The chapters on climate may not, and will not meet the wants of the American practitioner in many cases, as he constantly has cases coming under his charge who can not bear the expense of a long voyage to test the climate of the countries spoken of in Dr. Williams' work. Hence, if it had been possible to introduce some additional hints in regard to American climate, which in some localities we believe to be equally efficacious with those of European countries; the work would have more fully met the wants of the American reader. The work nevertheless will be, we doubt not, fully valued and appreciated by all in whose hands it may fall, and is deserving of careful study.

Injuries to Nerves and their consequences. By S. WEIR MITCHELL, M. D. Philadelphia: J. B. LIPPINCOTT & Co. 1872.

The above mentioned work comprises a volume of over 370 pages on a subject, which although it has for some time been considered as of minor importance is coming to be more investigated more thoroughly understood, and hence, more scientificially treated. In the fourteen chapters into which this work is devided, Dr. Mitchell treats of the Anatomy of Nerves, Neuro-Physiology, Physiological Pathology, Varieties of mechanical, and Symptomology of Nerve Lesions, Remote Symptoms, Sensory Lesions, Diagnosis and Prognosis of Injuries to Nerves, Treatment, Lesions of special Nerves, and Neural maladies of stumps.

Each of these subjects are treated clearly and to sufficient length to make the subject understood. In a large portion of the work the subjects are illustrated by cases, many of which are taken from those seen by the Author during tne late war.

On Page 291 in a table of cases of operations for relief of traumatic neuralgia, the author misquotes a case of excision of three inches of the median nerve performed by us in 1868 and reported in this Journal for June of that year. The result as stated by the author is "paralysis of extensors and loss of sensation in back of fore-arm" while the real result was that sensation and motion are perfect. The case was undoubtedly confounded with one of exsection of the muculo-spiral nerve reported in the same article.

Questions involving inquiries to nerves are constantly coming up for consideration and the treatise of Dr. Mitchell will no doubt be referred to with profit by those practitioners who may be so fortunate as to possess a copy. His work constitutes a practical contribution to the subject of injuries to nerves, which will be appreciated by all who have had experience in the diagnosis,and treatment of these accidents.

The Atlantic Monthly, Volume 30th.

The publishers of The Atlantic announce that Hawthorne's Romance, SEPTIMUS FELTON, will be concluded in August. THE POET AT THE BREAKFAST TABLE, THE COMEDY OF TERRORS, and THE LIFE OF JEFFERSON, will be continued throughout the remainder of the year. The next volume, beginning with the July number, will contain A paper of peculiar interest on an obscure phase of Post-Rebellion history, by Advocate General Bolles; A story in three Chapters, By T. B. Aldrich; Several literary papers by E. C. Stedman, in the vein of his article on "Tennyson and Theocritus;" A chapter of early Jesuit adventure in New York State by Francis Parkman; Stories, by J. W. DeForest; Two short romances, by H. James, Jr.; Sketches of Southwestern Life, by Wm. M. Baker; Siamese stories, by Mrs. Leonowens: A paper on Mythology, by John Fiske; Poems, by J. T. Trowbridge, John G. Whittier, J. R. Lowell, etc., with many other attractive articles on various subjects.

Books and Pamphlets Received.

History of Medicine from the earliest ages to the commencement of the nineteenth Century. By Robley Dunglison, M. D., L.L. D., etc. Arranged and edited by Richard J. Dunglison, M. D. Philadelphia: Lindsay and Blakiston, 1872. Buffalo: Theodore Butler & Son (by subscription only.)

A practical treatise on the diseases of women. By T. Gaillard Thomas, M.D. etc. Third edition, enlarged and thoroughly revised, two hundred and forty-six illustrations on wood. Philadelphia: Henry C. Lea, 1872. Buffalo: Theodore Butler & Son.

Clinical Lectures on the Diseases of Women. By Sir James T. Simpson, Bart.,

M. D., D. C. L., etc. Edited by Alexander R. Simpson, M. D. etc. New York: D. Appleton & Co. 1872 Buffalo: Breed, Lent & Co.

A Treatise on disease of the Bones. By Thomas M. Markoe, M. D., etc. New York: D. Appleton & Co. 1872. Buffalo: Breed, Lent & Co.

Forty-sixth Annual Report of the Surgeons of the Massachusetts charitable Eye and Ear Infirmary, Feb., 1872. Boston: James Campbell, 1872.

Quarterly Summary of the Transactions of the College of Physicians of Philadelphia. From May 18, 1870 to Feb. 7, 1872 inclusive.

Irrigations of Ice Water as a means of arresting Hæmorrhage in cases of Placenta Prævia. By W. A. Baldwin, M. D., Montgomery, Ala. Reprint from Richmond and Louisville Medical Journal, April 1872.

Remarks on Stricture Urethra of extreme calibre, with cases and a description of new instruments for their treatment. By F. N. Otis, M. D., etc. Reprint from New York Medical Journal, Feb., 1872.

On the Physiology of Syphilitic Infection. By F. N. Otis, M. D., etc. Reprint from "The Medical Gazette."

Notes on Fluid Extract of Senega, Rhubarb, commercial Bicarbonate of Soda, Chloral, etc. By Edward R. Squibb, M. D., of Brooklyn. Reprinted from the Proceedings of the American Pharmaceutical Association for 1871.

An Investigation concerning the Mechanism of the Ossicles of Hearing, and the Membrance of the Round Window. By Charles Burnett, M. D., etc. Reprinted from the Archives of Ophthalmology and Otology. Vol. II. No. 2 1872.

The Ethics of the Medical Profession. Read before the Sacremento Society for Medical Improvement. By Joseph T. Montgomery, M. D.

Statistics and Information relative to the Trade and Commerce of Buffalo for the year 1871. With a list of Officers, Members, etc., of Board of Trade. By Wm. Thurstone, Secretary.

Earth as a Topical Application in Surgery. By Addinell Hewson, M. D., one of the attending Surgeons to the Pennsylvania Hospital. With four Photo-Relief Illustrations, octavo pp. 309. Philadelphia: Lindsay & Blakiston, 1872. Buffalo: Breed, Lent & Co.

The Urine and its Derangements. With the application of Physiological chemistry to the Diagnosis and Treatment of constitutional as well as local diseases. By George Harley, M. D., F. R. S. with illustrations, octvao pp. 334. Philadelphia: Lindsay & Blakiston, 1872. Buffalo: Breed Lent & Co.

Dr. Rigby's Obstetric Memoranda. Fourth edition Revised and enlarged. By Alfred Meadows, M. D. Philadelphia: Lindsay & Blakiston, 1872. Buffalo: Breed, Lent & Co.

Memoranda on Poisons. By the late Thomas Hawkes Tanner, M. D., F. L. S. Philadelphia: Lindsay & Blakiston 1872. Buffalo: Breed, Lent & Co.

Second Annual Report of the Board of Directors of the Manhattan Eye and Ear Hospital. New York.

Proceedings of the Homœopathic Medical Society of Ohio. Seventh Annual session at Cincinnati Ohio, 1871.

Half-hour Recreations in Popular Science. Dana Estes, Editor. No. 3. Spectrum Analysis Explained. Illustrating its uses to science, and including the Theory of sound, heat, light and color. By Profs. Schellen, Roscoe and Huggins. Boston: Lee & Shepard, 1872. Buffalo. Herger & Ulbrich.

Der Kindergarten in Amerika. New York: E. Steiger, 1872.

Clinical experiences in private practice. Therapentical effects of Opium illustrated. By Z. C. McElroy, M. D., Zanesville, Ohio. Reprint from Medical Archives, May, 1872.

Tables I, II, III, IV, V, VI, VII, VIII, IX, U. S. Censuses 1870, 1860, 1850 showing morality of the United States by states and territories, with distinction of sex, percentage of deaths to population, etc.

A Treatise on the diseases of Infancy and Childhood. Second edition enlarged and thoroughly revised. By J. Lewis Smith, M. D., etc. Philadelphia: Henry C. Lea, 1872. Buffalo: T. Butler & Son.

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Toner's Medical Register and Directory.

The want of a comprehensive and reliable *Medical Register and Directory of the United States* has been long and seriously felt by the profession. Such a work, similar in scope to the Medical Register issued annually in Great Britain, we are persuaded, will do more toward encouraging Medical Organization, and to unite and elevate the regular profession of our country. than any measure hitherto inaugurated. The Author says: we are now making an earnest effort, and, with the co-operation of our medical brethren throughout the country, will shortly present to the profession a *Register and Directory* worthy of their confidence and support. It is desirable that the Register shall contain the name of every physician in the United States.

This circular is sent to over *fifty thousand* physicians, preparatory to publishing DR. TONER'S *Medical Register and Directory of the United States*. That it may be as complete as possible, application is made directly to each physician, so as to avoid errors, and for confirmation or correction of data already collected, and to obtain additional information of interest to the profession. To be published by S. W. BUTLER, M. D., 115 South Seventh Street, Philadelphia, Pa.

BUFFALO

Medical and Surgical Journal.

VOL XI. JUNE, 1872. No. 11

Original Communications.

ART. I.—*Albuminuria in Pregnancy and its relation to puerperal Convulsions.* By GEO. T. CAMPBELL, M. D. Skaneateles, N. Y.

Read before the Central New York Medical Association.

Mr. President and Gentlemen;—

I will first read the report of a few cases taken from my note book, as an introduction to the paper I offer you to day.

Case No. 1.—Was called early in the morning of Sept. 16th, 1868 to visit Mrs. J. H. in the town of Sennett, aged 30, Primipara, considered herself about eight months along in her pregnancy. Was taken with labor pains during the night while visiting at the house of a relative.

Previous to my arrival she had had two convulsions. Found her much excited, with occasional twitching of the facial muscles, rather pale, much thiner than before her pregnancy, no œdema of extremeties. Urine contained a moderate amount of albumen. Os Uteri fully dilated. Head of child low down in the inferior strait, occiput under the arch of the pubis. Had had no pain for an hour, applied forceps and delivered her of a living male child. Placing my hand on the abdomen found that the uterus contained another fœtus, gave her a drachm of fl. ex. ergot and waited, in the mean time chloroform had been moderately administered, whenever the convulsive muscular movements come on. In about 30 minutes after the delivery of the first child a characteristic convulsion occurred lasting about 60 seconds. As no labor pain had been produced by the ergot, soon as the convulsion ceased and before she recovered her consciousness, I introduced my hand, ruptured the membranes and delivered her of another living child, by podalic version. Firm compression being applied to the abdomen, I repeated the ergot, but the drug seemed to produce no effect. The uterus did not contract down well, and soon I discovered that internal hemorrhage was going on. I again introduced my hand into the uterus, the patient at this time being partly conscious resisted, but by holding her hands and feet I succeeded in bringing on uterine contractions, which expelled the placenta with quite a large quantity of blood. No more hemorrhage occurred. After the patient had regained her consciousness an opiate was given. No more convulsions. Next day mother and babies were doing well. The specimen of urine saved was lost by breaking of the vial. The next day there was no albumen.

Case No. 2.—Mrs. E. of Spafferd, Aged 21. Medium height, fair complexion, primipara. In the 8th month of her pregnancy, was taken with convulsions about 3 o'clock in the morning of March 14th, 1870. Dr. Tripp of Borodino was called to attend her. He opened a vein in the arm, but said, did not get much blood, gave a cathartic and used chloroform. I saw her in consultation about 3 o'clock P. M. At this time she was deeply comatose, face pale and puffy, hands and feet œdematous, respiration 36, heavy and labored, pulse 150. The urine had been scanty and highly colored for two weeks, the day before the attack she had an intense headache. The urine was drawn and found high colored, with a specific gravity of 1030; by heat it becomes solid with albumen. She had had already thirteen convulsions. No labor pains had been observed. On examination the os uteri was open sufficient to admit the end of two fingers, vertex presenting O. A. L. No beating of fœtal heart could be detected.

The case seemed nearly desperate and we concluded that the sooner the uterus could be emptied of its contents, the better would be her chances for recovery. It was very evident that there was no immediate prospect of this occurring by the natural process and we felt that if we waited for this to take place, there would be great danger of her dying undelivered. So we concluded to deliver her as soon as the os could be dilated sufficient to operate, accordingly the smallest size of Barnes' Dilators was introduced and injected full by the pump, this was very soon expelled into the vagina. I then inserted and filled the largest size, which was also discharged in a short time. The hand was then introduced into the vagina, and was soon able to dilate the os sufficient to pass it into the uterus. Ruptured the membranes and felt for the cord; there was no pulsation, seized the feet, turned, and delivered her of a dead child. The placenta soon followed with but moderate hemorrhage.

Soon after placing the patient in a clean bed, another convulsion came on, applied cold to the head and heat to the extremeties. Should have given Croton Oil, but we were in the country about six miles, and neither of us had any with us, gave Rochell Salts, Chloroform to be continued same as before. I then left. Dr. Tripp to remain. I learned afterwards that the salts operated very thoroughly early in the evening. The convulsions continued through the night coming on from half an hour to an hour apart. They were kept in check somewhat by the chloroform. After 9 o'clock in the morning of the 15th, no more occurred, at noon was aroused sufficient to take a cup of beef tea, first regained her consciousness on the evening of the 16th. Being in the neighborhood about two weeks after I called to see her, found her sitting up, bright and cheerful. She had just been told that day, the condition she had been in. So profound had been the impression on the brain she had forgotten all that had transpired for two weeks previous to her sickness, and cannot recall any of the events occurring during that time, to this day.

Case No. 3 —Mrs. T. B., Multipara consulted me about the middle of May 1870. She was in her 4th month of pregnancy. There was puffing of hands and face, feet swollen so as to require the largest size of men's slippers to wear. Urine small in quantity and contained albumen, could find no casts under the microscope. Ordered saline cathartics and diuretes, vegetable diet, to avoid tight lacing, and to let me know if no improvement took place or if any unpleasant symptoms should arise. Heard nothing more until the 10th of July, she said that two or three weeks before the œdema rapidly disappeared, with a considerable of urinary discharge, that her breasts also shrank down and lost their fullness; since that time had felt no motion. On examination, the urine contained no albumen. Told her that probably the child was dead and that she would likely miscarry.

July 30th, the membranes ruptured while at work, about 3 o'clock P. M. Labor pains supervened and she was delivered in the evening of a fœtus of about 6 months growth. It had been some time dead. The funis just as it entered the umbilicus was contracted to about the size of a large knitting needle cutting off the circulation and was the probable cause of the death of the fœtus. The point of interest in this case was the disappearence of the œdema and cessation of the secretion of albumen with the urine on the death of the child, some weeks before it was expelled from the uterus.

Case No. 4.—Mrs. K. was seen March 29th 1868 in consultation with Dr. Bartlett. The patient was six months pregnant, was complaining of severe headache, vomiting up every thing taken into the stomach, mind rather sluggish, general œdema, urine scanty and solid with albumen, on testing by heat and nitric acid. The treatment was saline in the form of Sedlitz powders until a full and free evacuation of the bowels should take place. Chloroform to the epigastrium, non-nitrogenous diet and hot air baths. I learned from Dr. B. that the vomiting ceased after the first powder was given, that he continued them until there were repeated watery discharges from the bowels, that the result of the treatment adopted was favorable. The œdema became less, the headache disappeared, the urine became more abundant.

April 1st, labor pains came on and she was delivered of a still born child.

April 3d, Urine free from Albumen. Patient comfortable.

April 5th, Owing to some error in the diet, vomiting again came on and the urine was again loaded with albumen, same treatment as before.

April 8th. Urine free from Albumen and patient did well from this time.

Case No. 5.—Mrs. R., Daughter of one of the oldest members of the Onondaga Co. Med. Society was taken in labor May 27th, 1868 in the forenoon. Had two convulsions before delivery which occurred soon after-noon without artificial interference, but the eclamptic attacks continued from half an hour to an hour and a half apart. About 10 o'clock in the evening Dr. Bartlett and myself were added to the consultation. The father, Dr. Porter and Dr. Earll, had been with her during the day. At this time she was profoundly comatose, the breathing stertorous and so loud that I heard it while entering the gate some rods from the house, the window being open. On drawing the urine it was found loaded with albumen. The convulsions continued through the night, until 6 o'clock the next morning when they ceased, but the coma continued without any muscular movements except the involuntary ones of breathing and circulation. She died that evening.

These cases occurring under my own observation within a little more than two years led me to choose the subject of albuminuria in pregnancy, and its relation to puerperal convulsions, as the subject of the paper I present for your consideration to day. And, although I may not be able to give you anything new in the history or management, I am sure you will all agree that there is no danger of being too often reminded of all that is known in regard to one of the most grave and fearful incidents of the lying in chamber. One where so much depends on the prompt and intelligent action of the medical attendant. There may be no time to consult authorities or call in counsel. And where two lives, mother and child, the central lights of a home, might be sacrificed, by the hesitation or ignorance of him to whose care they had been intrusted.

The literature of the relation of uræmia to eclampsia puerperalis extends back only about twenty years, previous to that time uræmic intoxication was never mentioned by writers or teachers as a cause of this malady. Nervous irritation, congestion and moral influences were regarded as the sole cause, and were considered sufficient to account for all the phenomena connected with it.

In about the years 1850 & 51 the fact of the coincidence of puerperal eclampsia and albuminuria, was verified and established by such men as Simpson Devilliers, Regnault Cazeaux, Cormack Blot, Frericks, Lintzman, Carl Brown and many othess and a new pathway was opened in this important and interesting field of medical research.

Since that time no branch of obstetrical science or practice has been more thoroughly discussed and explored than this. All the appliances of modern art, and the skill of modern culture, have been employed in the search for the truth concerning renal complications and uræmic poisoning in pregnant woman. And there is nothing in all that pertains to the practice of medicine, that more invites investigation, more fully awakens our deepest sympathies, or has better paid in results, for the time and labor spent than this. Statistics show a diminution of the rate of mortality of about 50 per cent.

As to the causes of albuminuria in pregnancy, there are various opinions. There is no doubt however, but that a certain proportion are from acute Bright's disease, some of which may come from the ordinary causes of that complaint, exposure to cold, bad food, abuse of alcohol &c., but mostly from the effects of the pregnancy itself, for we know it to be a fact that pregnancy like scarlatina and some other diseases, may be an exciting cause of a temporary Bright's disease. The theory that this morbid condition is caused by pressure of the gravid uterus on the renal veins, thus producing congestion of the kidneys, has several elements of plausibility. The fact that a large majority of the cases of eclampsia are primipara, and that twin pregnancies are more prone to it than single ones, has been regarded as presumptive proof of the truth of this doctrine, by a large class of able practitioners.

The unyielding abdominal walls of the one, and the size of the uterus in the other, would crowd that organ against the spinal column, thereby increasing the pressure on the kidneys.

The three cases of convulsions just reported were all first pregnancies and one was a case of twins, you will remember. Lintzman suggests that the frequency of convulsions in unmarried females is not caused so much from the mental excitement arising from their unfortunate condition, as it is by the tight lacing to which they resort to conceal their shame. That obstruction of the renal veins will produce albuminuria has been repeatedly proven by ligating those vessels in animals. But,after all,the theory of renal congestion by pressure can hardly be considered as proven, for we often have albuminuria in the earlier months of pregnancy, before pressure could take place, and then we have pressure applied in the very same manner in ovarian and uterine tumors and get no albuminuria as the result.

In case No. 3 reported to-day, where the albumen ceased to be secreted with the urine and the œdema suddenly disapeared on the probable death of the fœtus, the albumen in this case could not certainly have been caused by mechanical pressure. The death of the child would not have removed the pressure if it existed, but it stopped the secretion of albumen.

With our present knowledge in regard to the etiology, I think we may sum up by saying, that no doubt in some cases, it is from a temporary Bright's Disease; or Puerperal Nephritis perhaps would be a better name. In some others it may be from mechanical pressure. In others from causes connected with the pregnancy not yet understood. As to its relations to puerperal convulsions, we know that it is a fact, that a very large proportion of cases of eclampsia occurring during pregnancy, parturition and child bed have albuminous urine. The albuminuria of course is not the cause of the convulsions. It is important only as an exponent of some abnormal renal difficulty either structural or functional; and that some pernicious elements of the urine are not properly eliminated, but remain in the circulation producing what is known as uræmic intoxication. Frericks and Lehman independently and at the same time advanced the theory that uræmia was due to some ferment that transformed the urea into carbonate of ammonia, but this I believe has never been satisfactorily proven. We only know that when the kidneys from any cause cease to properly perform their function and some of the exerementitious elements of the urine remain to pollute the blood, we get coma and convulsions as the result. But what particular element or combination of elements produces this effect, is at present not precisely known.

While a large proportion of physicians have for some time accepted the doctrine that uræmia is the principal cause of eclampsia puerperalis; there are others in this country and Europe who, although they admit the frequency of albuminuria, yet do not consider that we have sufficient proof to claim that they stand in the relation of cause and effect. On the contrary they are inclined to think that both the eclampsia and the albuminuria are due to a common cause, the exact nature of which science has not yet determined. And the reasons given for this belief are

1st That there are many cases dying from convulsions, when on post mortem, the kidneys show only a trifling, if any lesion ; surely not enough to warrant the diagnosis of Bright's disease.

2nd. That we often have albuminuria and no convulsions occurring.

3rd. That we sometimes get convulsions and fail to detect any evidence of albumen or casts in the urine.

4th. That when it does happen, that albumen exists in the urine in connection with convulsions, it often does not precede the outbreak of the attack, but makes its first appearance during the labor or after a convulsion as occurred.

Of course all convulsive movements are from excitation or irritation of the true spinal system, centric or reflex, physiologists have proven that. We also know that certain substances circulating in the blood, either generated in the system or introduced from without like strychnine, rabies etc., will produce convulsive spasms. We also know that these substances will produce a nervous irritability, that may culminate in convulsions, whenever excited by something that under ordinary circumstances would make no impression, like the falling of water in hydrophobia, or the slaming of a door etc. in strychnine poisoning. So it seems to me it is, in albuminuria in pregnancy. The toxæmia produces an excited nervous sensibility, and that this is why the act of parturition so often appears to give origin to the convulsions. But whether the toxæmia is the fault of the kidneys, or that the blood is altered by something connected with the pregnancy and causes the kidneys to secrete albumen, I will not undertake to say, that the blood is contaminated in albuminuria, even when convulsions do not occur, is shown by the fact that the life of the fœtus is always in peril and that abortion is apt to take place.

In the treatment we find the same discrepancy of opinion existing that we do in regard to the etiology and pathology. The views held in reference to the latter, are likely to modify the practice, in the former it would surely puzzle the student to know what to do if he should undertake to read up all that has been written on the subject. Whenever I am consulted in regard to an approaching confinement, I make it a rule to examine the urine. If it is albuminous and continues so, as shown by repeated examinations, even when no other abnormal symptoms exists, I carefully watch the case; for if œdema has not yet come on, it will probably not be very long before it makes its appearance. The daily loss of albumen from the circulation would soon induce a hydropic condition, and the safety of the patient will very much depend on the prophylaxis.

The skin, the bowels and the kidneys should be so far as possible made to properly perform their functions, if costive, *epsom salts* should be given. If the urine is scantily secreted, especially if dropsical, I would freely give diluents, those diuretics that act principally by their bulk. The skin should be stimulated into increased activity by warm water, or hot air baths, good nutritious food, but sparingly of meat, and plenty of fresh air.

After convulsions have occurred, venesection chloroform, cathartics and delivery are the principal remedies employed. But opinions as to the prominence that shall be given to each, or their relative importance in the treatment are widely different. There are those eminent in the profession whose position and large experience entitle them to speak with authority who would exclude venesection entirely as not only useless, but hurtful. Prof. Carl Braun in his work on uræmic convulsions of pregnancy, translated by Duncan page 149, says, "since the days of Burns and Hamilton, it has been in many places and still is the custom to find the only panacea against eclampsia in abundant general blood letting, often repeated in the course of the day. A proceding which can only be justified as little in by the present state of theoretical knowledge in regard to this disease, as it is by the great mortality of mothers and children constantly produced by this method of treatment," I believe most German physicians adopt the same views.

Prof. Elliot in his obstetrical clinic says, "I find myself resorting less frequently to this practice even, or with less confidence in the abstraction of blood in each succeeding year."

On the other hand there are those, not a few equally eminent, who teach and practice the very opposite who claim that clinical experiance and the records of practice afford abundant evidence, that in a large majority of cases, venesection is the most reliable and should stand first in importance, all others being secondary.[1]

Now who shall decide when doctors disagree? I know of no other way than that each must decide for himself with the case before him. No doubt, a large proportion of American practitioners, while they do not discard bloodletting entirely, give it a much less prominent place in the treatment than formerly. In a strong plethoric woman I would not hesitate to bleed, and freely, if necessary, both to modify the severity of the convulsions and to prevent mischievous extravasation in the brain. Although congestion is not a cause of eclampsia, it may be a result. But as a rule the cases we have to deal with are not plethoric but the contrary. Albuminuria is decidedly an anæmic affection. The blood vessels may be full and distended, but it is watery blood. But chloroform is a remedy that is always proper to use, its efficiency and value is recognized by all. If skillfully and wisely employed, the threatened attack may sometimes be warded off, but if not they are generally rendered less severe.

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[1] American Medical Journal, 1868.

Prof. Simpson was of the opinion that the benefit derived from its use was not alone due to its sedative properties, but that it to some extent renders toxæmic blood less noxious. It has been shown by chemical analysis, that its inhalation caused the secretion of sugar with the urine, the blood also probably contains it. Now a little sugar mixed with urine outside of the body prevents the ordinary change of the urine into carb. of ammonia. Therefore he was inclined to think that the sugar, resulting from the inhalation of chloroform, might be of some benefit in preventing that change in the blood. Cathartics should be given early, choosing those that act promptly and quickly, they are useful as revellents and perhaps also to eliminate some of the morbid elements of the circulation.

As to artificial delivery, when to resort to it, and when to withhold our hand and wait, is often a very grave and anxious question presenting itself to our consideration. And one that can only be decided by careful and intelligent survey of all the conditions connected with the case before us.

In Case No. 1. Mrs. H. the head of the first child was so far advanced that a few good labor pains, no doubt would have expelled it. but no pains were there to do it. It was an easy matter to apply the forceps without much disturbance of the patient, and by moderately using chloroform there was but little danger that their application would be an exciting cause of a convulsion. It also was safer for the child. In regard to the second one, it was a different question to decide, you will remember ext. ergot F. ʒ I. had been given, that it had produced no pains at the end of half an hour, when a severe convulsion come on, lasting about one minute. Ordinarily I admit this would not be sufficient cause to forcibly deliver, but all of you who have had occasion to deliver a second child in twin pregnancies, by turning will remember with what facility and ease it can be done. Knowing this fact and also knowing the extreme danger to both mother and child, if many such convulsions as she had just passed through should be repeated, together with the absence of all pain, decided me to deliver; and the result was very gratifying. The mother and two babies safely delivered from their extreme peril and restored to their alarmed and anxious friends.

In the Case of Mrs. E. It was very evident that unless the pregnancy was soon terminated, she would die undelivered. There had been no labor pains, therefore we decided to interfere and deliver. The case ended favorably. Of course we cannot know, but the result would have been the same, if the operation had not been performed, but I doubt it very much. The fact alone that the albumen disappears in most all cases, very soon after the pregnancy ceases to exist, seems to me to be a sufficient reason to warrant us in delivering soon as practicable, yet I would not interfere until I was pretty sure the operation would be less likely to do harm, than the detention of the child in the uterus. With our present means at hand for producing dilitation, chloroform, warm douche, dilators, we can deliver much sooner and with less shock than formerly. In regard to the induction of labor before any convulsions have occurred, when in spite of treatment the disease progresses, when the brain, stomach, and nervous system generally indicate serious trouble, the fœtus being viable, it should be done.

But when the pregnancy is not far enough advance for the child to sustain an extra-uterine existence, and the operation is only for the interest of the mother, we would not be justified in interfering until her life was in actual danger.

ART. II.—*On the recent Advances in the Theory of Vision.* By H. HELMHOLTZ, (*of the Royal Society of London.*)

Translated from *Les Annales d' Oculistique*, BY F. W. ABBOTT, M. D.

(*Continued.*)

When two circumstances are connected by an unvarying relation, one is the sign of the other. It appears to me that innumerable errors and many false theories depend upon this, that in the study of the perceptions, we have not up to this time distinguished with sufficient care between the notion of *sign* and that of *image.*

For it to be an *image* it is necessary that this representation should be of the same kind as the object represented; it is an image only upon this condition. A statue is the image of a man in so much as it imitates by its form, the form of the one whom it is intended to represent. Even when the question is concerning a statuette of reduced size, the dimensions of the original are not less always represented by certain dimensions.

A painting is the image of the original because it imitates, on the one hand, his colors by certain analagious colors, and on the other hand, because it imitates a part of his dimensions, those which it presents in perspective, by certain corresponding proportions.

The nervous irritations in our brain, and the representations in our consciousness may be images of what occurs in the external world, in so much as by their chronological order the representations imitate the chronological order of the facts, and in so much as they represent the relations of objects by the relations of the signs, so that the order of succession of the external objects is reproduced.

This relation between objects and the representations which we make of them, is evidently sufficient for our intellect for the task which it sets for itself, of seeking out the analogies which exist in the midst of the diversity which the external world presents, and re-uniting them to form from them ideas or laws. I will show in the third part of this exposition that this relation answers equally for all practical wants.

It is undoubtedly the case that uneducated persons, who are accustomed to repose implicit confidence in the testimony of their senses, are not the only ones who will scarcely be disposed to admit so great a want of accord between the qualities of the sensation and those of the object which occasions it; those who recognize the existance of illusions of the senses will not, perhaps, have less difficulty in declaring themselves convinced. Have not physicists hesitated a long time and made and exhausted all sorts of objections before admitting the identity between the rays of light and heat, whose essential difference appears to reside only in the nature of the sensation produced? If Goethe, as I have elsewhere stated, refused to accept Newton's theory of colors, did not this depend above all on the fact that he could not persuade himself that white, which produces the sensation of brightest light, could be composed of darker colors? This fact, discovered by Newton, was the germ of the new doctrine of the energies of the senses; his contemporary John Locke was likewise able to expound with perfect occuracy the principal propositions relating to the signification of the qualities perceptible by the senses. Here, manifestly is found the stone of stumbling for many persons, and for all that I nowhere encounter the contrary opinion formulated with sufficient precision for it to be possible to demonstrate its falsity. I think that this depends upon the fact that the causes of dissent rest upon reasons of a more fundamental order.

We remark, first of all, that it is necessary to be very careful not to confound to *seem* and to *appear*. The colors which bodies present appear in consequence of certain objective differences in the nature of the bodies; so, even from the scientific point of view they are not *vain appearances*, even though the manner in which they appear depends principally upon the nature of our nervous apparatus. It is only a *deceitful appearance* when we confound the normal appearance of one object with that of another. Now, this does not take place in the vision of colors: they have no manner of appearing which we may call normal, as it regards the manner in which they appear to the eye.

The principal difficulty here appears to me to lie in the notion of *property*. Everything becomes plain as soon as we are convinced that, in general, every property or quality of an object is, in reality, nothing else than the aptitude of this object to produce certain actions upon other objects. The action may be produced either between the analogous particles of the same body, whence result the differences of the state of aggregation, or, as chemical reactions, between the particles of two different bodies, or finally upon the organs of the senses, and it then manifests itself by sensations analogous to those which we are here considering. We give to such an action the name of *property*, when the reagent by which the effect is produced is implied without being expressed. When we speak of the solubility of a substance, we mean the way in which it acts in relation to water; when we speak of its weight, we understand the force which draws it to the earth; it is by the same right that we say that a substance is blue, because we imply, as useless to say, that we only have to do with the effect which it produces on a normal eye.

But since that which we call property is always a relation between two things, such an action evidently cannot depend solely upon the nature of the thing which acts; it necessarily depends also upon the nature of the thing upon which the effect is produced. Thus it would be nonsense to speak of the properties of light in itself, of those things which it might possess independently of every other object, and to attempt to rediscover these properties in the sensation of the eye. It is a logical contradiction to suppose such properties; nothing of the sort can exist; there can exist therefore no conformity between the sensation of colors and similar qualities inherent in light.

We think that these reflections have been imposed upon many profound thinkers for a long time; we find them clearly expressed by Locke and Herbart, and they are in accordance with the ideas of Kant. To make onesself master of this subject a remarkable faculty of abstraction would perhaps be necessary, while we have to do with notions whose evidence becomes, so to speak, palpable owing to the facts which we have exposed.

After this excursion into the domain of abstractions let us return to colors, and examine them in so far as they are the *sensual signs* of certain external properties pertaining either to light or to the bodies which reflect it. For a sign to be good, we demand first of all that it be constant, that is to say, that the same object should always accompany the same sign. Now we have already seen that even in this respect sensations of colors leave something to be desired. They are not entirely uniform in the retinal field; but the constant motion of the eyes shuns the rock here by the same process which has served to remedy inequalities in the sharpness of the retinal image. This way which we employ of looking at objects renders the defect less sensible.

In the next place we have seen that in consequence of fatigue, the intensity of the irritation may rapidly undergo considerable variations. Here also the constant motion of the eyes has generally the effect of spreading the fatigue equally over the whole retinal field; so that it rarely happens that well defined accidental images are formed, unless it is from very luminous objects, such as the sun or very brilliant flames.

Now, from a uniform fatigue of the whole retina the intensity of the colors which we look at varies almost the same for all, and fatigue produces simply the same effect as though the illumination decreased a little.

This leads us to study the variations which the visual images undergo, when the illumination of the objects varies.

We still encounter instructive facts here. We are able to see the objects of the external world under an illumination whose intensity varies in enormous proportions: the brightest solar light is 150,000 more intense than the light of the full moon. The color of the illumination may also sensibly change, whether we use the artificial illumination of flames which always diffuse a more or less redish yellow light, or are in the greenish shadow of the foliage of trees, or in a room furnished with curtains and hangings of intense colors. The intensity and the color of light which illuminated bodies send to the eye varies evidently with the intensity and the color of the illumination. We know that the differences between the colors of objects proceed from the fact that different substances reflect and absort unequally the light of the different simple rays of the sun. Vermilion reflects, without sensibly enfeebling them, the rays whose wave-length is considerable, but it only reflects feebly all the other rays. It is for this reason that it appears to us of a red color, that of the rays which it reflects to the eye. If we illuminate it with a light which contains no red, it appears almost black.

As a result of this, the apparent color and intensity of illuminated objects ought to vary with the color and intensity of the illumination. Every day experience offers us a hundred examples of this fact, which furnishes to painters an important subject of study and upon which rest, many of their most brilliant effects.

But what interests us most in vision is to distinguish and to recognize the objects which surround us; especially if, from an esthetical or philosophical point of view, we sometimes turn our attention to the illumination. Now, the element which is constant in the color of an object is neither the intensity, nor the color of the light which it sends to the eye, but the relation between the intensities of the different colored elements of this light and the intensities of the corresponding elements in the illumination. This relation is nothing less than the expression of a constant property of the object.

In view of these theoretical considerations, we would think that it would be extremely difficult to appreciate the color of an object when the illumination varies. We see on the contrary, that in practice the appreciation of colors takes place with the greatest certainty, even without reflecting, and in the most varied conditions. Illuminated by the moon white paper is darker than black velvet in clear day light; nevertheless we never hesitate to recognize the paper as white and the velvet as black. Much more, if a gray object, illumined by the sun, reflects a light of the same color and perhaps also of the same intensity as a shaded white object, we have much more difficulty in recognizing this than the identity of the color of a white shaded paper and a white paper illumined by the sun. Gray seems to us specifically different from white; it is thus, when it constitutes the color of an object, because the surface of a body which reflects part of the light ought necessarily to be constituted otherwise than that of a body which reflects the whole of it. Nevertheless illumined gray may furnish the same impression to the retina as shaded white. Painters employ gray to represent white situated in the shade, and if they proceed correctly the object represented appears perfectly white. To persuade ones self experimentally of the identity of the color of gray and of white it is only necessary to strongly illumine, by means of a leas, a gray disc surrounded by a white back ground, so that the limits of the illumination correspond with those of the disc, which prevents the artificial character of the illumination from manifesting itself. Then the gray disc appears as white as the back ground.

We may admit certain, phenomena of contrast authorise it, that the illumination of the purest white furnishes us the standard for judging of the dark objects which surround it, because, in ordinary conditions, the intensity of all the colors deminishes uniformly when the illumination becomes more feeble, or when the fatigue of the retina increases.

For the extreme degrees of illumination, this uniformity of variation persists objectively, but does not re-appear in the sensations. When the illumination is blinding, the differences of intensity of the bright parts become scarcely perceptible to sensation; when the illumination is very feeble, it is the intensities of the darkest objects, on the contrary, which become imperceptible in their turn. Thus in the light of the sun, the colors of objects of mean intensity resemble more the colors of the brightest objects, while in moon light they approach those of the darker bodies. Painters profit by this difference to represent illumination by the sun and that by the moon. To express illumination by the sun, painters are obliged to brighten the tints of the objects of mean intensity, while to represent illumination, by the moon they darken the tint of these same objects. There is still another difference which rests upon sensation. When the intensity of the illumination increases, the impression of the red and of the yellow increases more rapidly than that of the blue. If we match, according to intensity, a blue paper and a red paper by day light, the equality of the intensity does not persist in different illuminations; in the sun the red seems more intense, while by the light of the moon or the stars the blue predominates. The same difference exists for the spectrum colors; painters also give a yellowish tint to their landscapes, illuminated by the sun, and a blueish tint to those which are designed to represent the effect of moon-light.

That which precedes shows to what a degree our appreciation of colors becomes independent of the absolute intensity of the illumination. So also, we are accustomed to abstract almost completely the influence exerted by the color of the illumination. We know that, to a certain degree, the light of candles is yellowish red in comparison with that of day; but to see how great the difference between these two light is, it is necessary to see them simultaneously, with the same intensity and one beside the other, as takes place in the experiment with colored shadows. Let us allow the light of a covered sky, that is to say the feeble light of day, or preferably the light of the moon to penetrate into a darkened room, and hold a white paper horizontally so that the light shall fall obliquely on the paper; we will let the light of a candle fall on the paper from another quarter, then a rod held perpendicularly to the paper gives two shadows; the one, where the light of day does not reach and which the candle alone illumines, is reddish yellow and seems such; the other, projected by the candle and where the light of day alone reaches, is white, but appears blue by contrast. The blue and the reddish yellow of the two shadows are the colors to which we give the name of white according as the dominant illumination is that of day or that of the candles. When these two colors are found side by side, they seem very different and even to some extent saturated. Nevertheless we never hesitate to recognize the white paper as such by candle light and to distinguish it from an orange colored paper.

What is more remarkable in this series of phenomena is, that we do not confound the color of a colored transparent covering with that of the objects situated behind it, and from this springs a series of very interesting phenomena of contrast. Still further, when we look through a green vail it may happen that white objects, the light from which is mixed with green by its passage through the vail, appear reddish from the formation of the accidental color of green which is red. This experiment shows to what a degree we separate the color of the objects themselves, from that of a transparent medium through which we view them.*

Changes of color analogous to those noted in the two last experiments are called *phenomena of contrast.* For the most part these are illusions relating to the color of objects and attributable to illy defined accidental images. That which is produced when we look successivily at colored objects we call *successive contrast* But the phenomena of contrast depend also in part upon the fact that the habit of judging of the colors of objects from the relations of intensity and of color of the different objects seen simultaneously may deceive us, when the relations differ from those to which we are accustomed. It is this which takes place, for example, when we are in the presence of two sources of illumination, or of colored transparencies, when we think that we are in the presence of homogeneous conditions. Then is produced *simultaneous contrast.* In the experiment of the colored shadows, for example, the doubly illuminated back ground, which is the brightest of surrounding objects, gives us a false standard for white: compared with this white, the true white of one of the shadows, which is less intense, appears blue to us. What increases still more the effect of these contrasts is, that differences of sensation seem to us greater when they are clearly perceptible than in the contrary case. Now the differences between the colors which we see simultaneously are clearly perceptible in comparison with those which we only compare from memory; the differences between neighboring objects in the visual field are clearly perceptible in comparison with those between the colors of more remote objects. All this is far from being without influence. A number of the most varied circumstances, whose study in detail throws light upon the grounds upon which we judge of the colors of objects, forms a chapter which we must content ourselves with simply noticing here. This subject is, moreover, just as interesting as it regards the theory of painting as for the physiologist, because painters very often purposely exaggerate the natural phenomena of contast to produce in the mind of the spectator an impression of differences of intensity and of saturation greater than those of which the colors of their palettes enable them to obtain a representation.

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*See a series of experiments of this this kind in my Physiological Optics, pp. 398-400; 401 411. (Pages 523-525; 530-538 of the French translation.)

We have come to the end of the theory of sensations. It follows from our research that the qualities of the visual sensations are nothing else than signs relating to certain qualitative differences either of the light or of the illumined objects, but do not posses an objective signification exactly corresponding; we have even found that these signs are far from presenting, with perfect exactness, constancy, this essential quality of a system of signs: All that we have been able to say in their favor is only that, *under the same conditions,* the same qualitative sensations are developed by the same objects. But in spite of all we find, finally, that this system of signs suffices to enable us, constantly and everywhere to recognize colors with an accuracy sufficient and even astonishing, if we consider the difficulties of this important task. In the midst of a constantly varying system of intensities and of colors, varying with the illumination, with the fatigue of the organ, with the part of the retina affected at the moment, we are able to disengage this constant quantity, the color of the object, which depends upon the invariable nature of its surface, and this operation does not demand long reflection; it is instantaneous and its result has for us the nature of evidence.

The inaccuracies and imperfections which we have found in the optical apparatus and in the retinal image are nothing in comparison with the incongruities which we have encountered in the domain of the sensations. We might say that nature is delighted in accumulating contradictions to overthrow entirely the theory of a pre-existing harmony between the external and the internal world.

Have we reached the end of our study? We think not; the problem being complicated it would appear that we ought not to attempt to discover how vision takes place. Nevertheless let us not reproach science with depopulating by a sterile criticism the beautiful domain of our senses; neither let us plant ourselves upon a pretended common sense to accord a greater confidence to the testimony of our senses than to the results of physiology.

It remains for us to study the notions of space. Let us see whether in this last chapter science will not finish by justifying the confidence which we give to the testimony of the senses.

(To be continued.)

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ART. III.—*Report of a Case of Aneurismal tumor following penetrating wound of shoulder. Operation for ligation of right subclavian Artery.* By C. C. F. GAY, M. D. Surgeon to the Buffalo General Hospital.

On the morning of the 25th March 1872, William Dusenthal aged 22 years, was stabbed by a dirk knife, in the hands of one Donnaberger, while engaged in a general fight. The blade of the knife was six inches in length and three fourths of an inch in width and tapered to a point.

The young man bled profusely, and was without medical attendance for twenty-four hours, although physicians had been summoned. As nearly as I am able to judge, from the account given me by a member of the family (who speaks but indifferent English), the hemorrhage was twice suppressed by syncope; it was estimated that two quarts of blood had been lost, but was entirely controled when Dr. Burke arrived and took charge of the patient, and continued in daily attendance, administering stimulants tonics and nourishment.

On Friday morning April 5th, I was requested by Dr. Burke to visit the patient, along with him, in consultation. I was called on account of a pulsating tumor, that had first made its appearance upon, or near the shoulder, on the morning of April 3rd. On examination, I found the patient pale, pulse 120 per minute, troublesome cough, difficult respiration, bronchial rale, dullness on percussion over infraclavicular region, fingers numb, arm at times very painful—at intervals it felt dead, and the tumor excessively painful.

I applied stethoscope over the tumor, but no pressure could be made upon the tumor, on account of the intense pain the slightest pressure caused. All the symptoms of aneurism were readily detected, and there could be no possible doubt of the correctness of the diagnosis. The tumor was the size of the lower half section of an ordinary tea cup; but I believed it to be, but the presenting portion of an aneurism, the larger half, or more, of which, extended downwards behind the clavicle.

It occupied a position, midway between the neck and outer aspect of the shoulder, near or at the margin of the trapezius muscle, and about one inch back of the clavicle, upon the right side.

The wound made by the dirk was closed, and the cicatrix was three fourths of an inch in length, and just behind the clavicle.

It was believed that the subclavian artery been wounded, and that, as the pulsating tumor had so suddenly appeared, and was so rapidly enlarging, it would soon rupture and destroy the life of the patient by hemorrhage. I advised an operation, and Dr. Burke concurred with me, both in my diagnosis, and in the propriety of an operation. The patient begged of me to perfom it at once, although I had told him the danger that must attend it. On the following day Dr. Wetmore was called in consultation, who also concurred in the diagnosis, advised an operation at once, and assisted in its performance, in the presence of several medical gentlemen. Chloroform was administered and its effect maintained by ether. I cut down immediately upon the scalenus muscle, and exposed the artery to view. Its pulsations were so feeble as to be scarcely discernable by the eye or touch. At this stage of the operation not an ounce of blood had been lost. After sponging out the cavity dry, my eye rested upon a dark clot, upon which my finger was placed, when by its own weight it penetrated through, and into the pleural cavity. I could pass my fore finger its full length downward, upwards and laterally, without being able to measure the extent, of what I at first supposed to be an aneurismal sac. I discovered coagulated blood, extending from within the pleural cavity, upwards to the shoulder; scooping out upon my finger, just enough of the clot to show to the gentlemen present, that coagula was present. Upon withdrawing the finger fluid blood and two or three air bubbles escaped, but the orifice at once closed. At my request Dr. Wetmore now introduced his finger, and learned these facts, namely, that there had been internal hemorrhage, following the stabbing with the dirk knife, and the vein was now discovered, just at the orifice, from which the internal hemorrhage had proceeded, and so soon as I had broken up the coagula, this vein began to bleed. It was ligated at once, when all hemorrhage ceased. The presence of this large amount of coagulated blood within, and above, the pleural cavity, was an unpleasant discovery. Its presence was unexpected. It was there and had been there for days. Its presence was not at all desirable. It was unsought for and unwished for. It was, and is, beyond the wisdom of any man, however skillful, to have made a prior discovery of the presence, and extent of this coagula, by any diagnostic means at present in our possession. It might perhaps, have been wise then and there to have abandoned any further operation interference, since there, could have been but one conclusive logically reached, namely, the inevitably fatal result, sooner or later (and much sooner than later) under any circumstances. I however proceeded to, and did ligate the artery at its third portion. I also applied a second ligature, and as doubt was expressed as to the portion of the artery ligated, I dismiss this second ligature with this simple allusion to it, as being of no consequence whatever.

The operation lasted one hour. I should remark in passing, that when the integument and fascia along the clavicle were divided, the tumor presented the size, without exaggeration, of once and a half that of my closed hand, and so much impinged upon the space between it, and the clavicle, that there was but just room for my finger to pass between them. I forbore to make pressure upon it, or to crowd it back out of my way, fearing its walls might rupture. The location of the aneurism, namely, at the margin of the trapezius muscle, led to the supposition that the tranversalis colli, which terminates at this point, was the artery implicated; but the size of the tumor led to the belief that a much larger vessel was wounded and the locality pointed to the third portion of the Subclavian as the seat of injury, or that there might be given off from the third portion, a supernumerary artery, like a specimen I have in my possession, the artery being larger in this specimen, than any one of the branches of the thyroid axis.

"The wound was dressed and the patient placed in bed, there having been no subsequent hemorrhage. Twenty-four hours after the operation, the patient was visited by Dr. Burke and myself, and we congratulated ourselves and the patient, upon his comfortable condition. Pulsation in the tumor had entirely ceased, the general aspect and courage of the patient was good, although he still complained of numbness in his fingers. During the night he grew worse, and died at 4 o'clock the following morning.

Post Mortem by Dr. Briggs sixteen hours after death, in presence of several medical gentlemen. Upon opening the thoracic cavity, fluid and coagulated blood was found, estimated at one quart, within the right pleural cavity. It was in process of decomposition. The right lung at its apex was wounded, collapsed, and was undergoing decomposition; air had escaped from the wound of the lung and there was emphysema.

Upon carrying the dissections up to the shoulder, coagulated blood was found to extend to the aneurismal tumor; it was firmly impacted beneath and around it, imparting to the tumor, and lending to it size, that did not belong to it. By accidental pressure with my fore-finger, the sac burst, and the aneurismal clot was projected with considerable force into my hand. This clot was the size of a Bantam's egg, cupped at one extremity and coneshaped at the other extremity. It was hard, of a lightish color and mottled. In consequence of the rupture of the sac, and want of time, I have to regret that the dissections were not prosecuted to the extent of ascertaining the artery implicated in the aneurism.

I have thus given simply a narative of this case, which I regard as one of the most interesting and instructive surgical cases that it has ever been my province to observe; purposely reserving for a supplementory report, remarks upon some points, which I cannot but believe as of very great interest and value to the profession.

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Miscellaneous.

Two Cases illustrating the production of Vowel and Consonant sounds.

By Prof. E. M. MOORE, M. D., Rochester, N. Y.

The function of voice has always been a theme of interest to a wider circle of men than physicians. The most profound students of language, those who push their inquiries into the phonetic forms of the dim past, seeking to unravel the net of history in the twilight of the race, are perhaps more interested than any other class, except the pure physiologist. The students of Sanskrit have brought forward elaborate and excellent treatises upon phonation, written more than three thousand years ago, pushing the inquiry as far and as accurately as mere observation could go. Since the discovery of the laryngoscope the whole subject has undergone and is now undergoing a complete revision by the practice of auto-laryngoscopy, and we shall undoubtedly have the whole topic vastly advanced. Indeed it may be so far, as to enable us successfully to initiate an inquiry into an anatomical explanation of certain phonetic laws, which some profound German scholars have propounded, and also lead to the discovery of others. These men look to the physiologists, in hopes that a law of anatomical and physiological relation to sounds may be discovered, upon which to rest a solid foundation for the expansion of ethnology and comparative philology.

The unanimity of opinion among physiologists, who have given their attention to the function of the larynx in the production of the voice, has led me to note two cases of striking interest, and so conclusive in their character, that I think they will be regarded as an offset to the experiments and observations that have heretofore been made, and upon which opinion has rested,—They have the merit of substituting fact for inference, and, indeed, fact bearing the potency of an experimentum crucis. In order, however, to the full understanding of the question, I will take Carpenter as the authority for the standard opinions, and recite his view on the subject at the point I propose to elucidate.

The doctrine of the reed-sound in the production of the laryngeal voice, it seems to me, is firmly settled and universally admitted; the proof resting not only upon the form of the organ, but on the production of sound from the artificial larynx. Here at the vocal chords. the body of sound known as the sonant voice, in contradistinction to the whisper, is undoubtedly made. But the especial point to which this paper is directed is not this, but to the correction of opinion with reference to the production of vowel-sounds. These are asseverated to result from the passage of air along the mouth, and to be the effect of its modification, including, or course, the pharynx and nose as factors. In proof of this I quote Carpenter.

"The vowel sounds are continuous tones modified by the form of the aperture through which they pass out; while in sounding consonants the breath suffers a more or less complete interruption in its passage through parts anterior to the larynx. Hence the really simple vowel-sounds are capable of prolongation during any time that breath can sustain them. This is not the case, however, with the real diphthongal sounds (of which it will presently appear that the English *i* is one), whilst it is true of some consonants. It seems to have been forgotten by many who have written on this subject, that the laryngeal voice is not essential to the formation of either vowels or consonants; for all may be sounded in a whisper. It is evident, therefore, that the larynx is not primarily concerned in their production, and this has been fully established."

Again he says: "That the vowel-sounds are produced by simple modifications in the form of the external passages is easily proved, both by observation and imitative experiment. When the mouth is opened wide, the tongue depressed, and the velum palati elevated, so as to give the freest possible exit to the voice, the vowel *a* in its broadest form *(ah)* is sounded. On the other hand, if the oral aperture be contracted, the tongue being still depressed, the sound *oo*, the continental *u*, is produced. If attention be paid to the state of the buccal cavity during the pronunciation of the different vowel-sounds, it will be found to undergo a great variety of modifications, arising from varieties of position of the tongue, the cheeks, the lips, and the velum palati. The position of the tongue is, indeed, one of the primary conditions of the variation of the sounds, for it may be easily ascertained that, by peculiar inflections of this organ, a great diversity of vowel sounds may be produced; the other parts remaining the same. Still there is a certain position of all the parts which is most favorable to the formation of each of these sounds; but this could not be expressed without a lengthened description. The following table, slightly altered from that of Kempelen, expresses the relative dimensions of the *buccal cavity* and of the *oral orifice,* for some of the principal of these—the number 5 expressing the largest size, and the others in like proportion:—

Vowel-sounds.	Oral opening.	Size of Buccal cavity.
a as in ah	5	5
a " name	4	2
e " theme	3	1
o " cold	2	4
oo " cool	1	5

"These are the sounds of the five vowels, *a, e, i, o, u.* in most continental languages: and it cannot but be admitted that the arrangement is a much more natural one than that of our own vowel-series." Having made this quotation, I proceed at once to give the first case, bearing directly on this point:—

Edward Larkin, æt. 56, born in Ireland, April 14, 1871, attempted suicide with a razor. A cut was made immediately above the thyroid cartilage, extending an inch each side of the median line horizontally, and shaving off the epiglottis at its base. The muscles below and above, by their tonic power, soon made an oval opening, two inches by $\frac{3}{4}$ of an inch. Swallowing became impossible. On the fourth day he was brought to St. Mary's Hospital, having taken no food. No attempt was made to bring the edges together, trusting to the granulating process. A tube, introduced through the opening into the œsophagus, conveyed food to the stomach. This process was continued for about five weeks, when swallowing became possible, although the opening, which had become nearly circular, was about half an inch in diameter. At the present time (June 10, 1871) he swallows solid food, but part of the liquid food will run out of the opening. At any time he was able to talk by bending his head forward and temporarily closing the opening. When the head was thrown back, he immediately lost this power.

The experiment of enunciation of the alphabetical sounds, with the head thrown back, was made with the vowels first. The four sounds of *a* as in *all, arm, age, at,* were at once distinctly rendered. *E,* next attempted, always resulted in *a* as in *age.* [This, I think, must be put to the account of the Hybernian larynx.]

I is a diphthong, and was clearly rendered.

O, both long and short, was well brought out as in *note* and *not.* The short *u* as in *cut,* and represented by nearly all the other vowels, was also well pronounced.

Y as *I.*

The diphthong were more difficult, and some could not be uttered; *ou* as in *our* was pretty well pronounced; *oo,* pure vowel, was uniformly rendered as *o* in *note.*

Oi, as in *noise,* could scarcely be distinguished.

The alphabet, taken in order, resulted in the enunciation of the vowel element. Thus our letter *B* was pronounced *a,* as also *C* and *D.* There was absolutely no consonant uttered. The breathing, which is represented by the letter *H*, was perfectly rendered. It was clear and smooth, and when joined to a vowel was spoken loudly and clearly. Thus, *Ha* and other sounds of *a*, *Hi* and *Ho*, also *Hu short*; were pronounced with ease. *K* and *G* are considered guttural aspirates. Any attempt to produce them resulted in the pure aspirate.

These experiments were repeated on two different occasions, a few days apart, and with the same results. But on the second trial it was suggested that some air might pass into the mouth, and a curtain of buckskin was fittet to the upper part of the aperture, thus cutting off all the air that might reach the mouth. The result was the same.

As regards the finish of the tones called vowels, there was clearly a defect. This might be due to the thickening of the mucous membrance, incident to the inflammation in its immediate neighborhood—a good and quite sufficient cause. Or it might be explained by the absence of the modification by the mouth, tongue, and other parts, which have been supposed to create the sounds, but which, as is here shown, can only polish and complete what has been begun. But a little practice will enable one to hold the parts above the larynx perfectly quiet, and still produce the vowel-sound. This case is so pathognomonic, if I can apply such a term, that it must reverse and settle opinion upon the seat of certain vowel-sounds.

The number of sounds that Larkin was able to enunciate is limited; but I will now cite another case that, from its peculiar character, supplements the one just detailed, and by its results confirms the belief that Larkin's ability to enunciate as described would exist in all others, thus placing the seat of such vocalization as normal in all.

During the year 1856 I was called into Orleans Co. to see Edward Matthews, who was suffering from urgent dyspnœa. I arrived at his house in the night, and at once opened the crico-thyroid space. The relief was sufficient, and I did not see him again for a long time. Two years after, as I am informed, a piece of bone was removed from the opening, which had been kept free by a tube. This seemed to be lodged in the larynx somewhere, but the statement is too indifinite to be thoroughly understood. Nevertheless, there was a great abatement of unpleasant symptoms from soreness and dyspnœa. But slowly and gradually the glottis became closed, and for more than ten years a cicatrix has cut off the air from the trachea into the mouth, the closure being at the base of the larynx and absolute, not the least air passing through. Mr. Matthews, who is now forty-four years of age, is a man of intelligence, and has made great and constant efforts to enunciate clearly, and has improved much of latter years. Of course, every sound is a whisper, and also short, for the air is driven by the buccinators and the muscles of the tongue and the supply of air is small. From this man we would expect to hear the consonants, if he could speak at all, and this is essentially true.

R and *L* he cannot pronounce, as they require a continuous tone, and are interested in a quiescent state of the buccinators, which are the chief means of forcing the air out. But even these sounds can be faintly traced in combination with others, in the construction of a word. The pure breathing represented by the letter *H* cannot be made at all, or in any combination. The single vowel-sounds of *a*, as in *arm*, *at*, *all*, and *age*, cannot be rendered at all. A blowing sound was the result of the effort, and when the finger was placed over the aperture in the trachea there was absolute silence. The celebral command was obviously to the larynx. *O* was also silent, or resulting in *oo*, as in *ooze*. *I*, as in *isle*, was also silent when the aperture was closed, or a mere blowing sound if opened. *E* clearly enunciated, and this vowel is made in the front part of the mouth, by throwing the tip of the tongue against the lower incisors and curling it upwards. While fixed, the continuous tone *E* results.

The nameless vowel represented by *u* as in *nut*, *e* as in *err*, *i* as in *sir*, and *o* as in *honor*, sometimes styled the urvocal, could not be uttered except in connection with consonants.

Short *o* as in *not*.
" *e* " *net*.
" *i* " *nit*,
could be rendered in conjunction with consonants, but, with the exception of short *e*, could not be rendered individually. The diphthongs were much more successfully pronounced than by Larkin.

Thus the soft *u* as in *gratitude* is a diphthong composed of *e u* (*oo*) and was rendered beautifully.

Oo is really a very pure vowel, perhaps the most of any, if we except *e*, but it is not so placed in our catalogues, and I can hardly understand why, unless it happens to be represented by a double character. This is made at the lips exclusively, as in *ooze*, and was rendered with great perfection.

Oi as in *noise*, and *ou* as in *our*, both failed.

As might be expected, the consonants are generally pronounced, most of them individually, but some only in connection with vowels.

B, C, D, F, G, K, P, T, X, Z, and V, pronounced as words and pure. But H not all. L. and R. very faint, when combined with *e* long.

M and N in connection with vowels only.

The consonants, P and T, made in the front part of the mouth, were more easily managed than the others. Accordingly the vowels within his capacity were sure to be brought out best between them. Thus:—

Pet	Pretty well.
Pit	" "
Pot	" "
Put	" "
Peet	Admirably.
Pout	Not at all.
Peut	Beautifully.
Pat as *Put* or *Pot*.	
Pate, not at all, or as *Peet*.	
Th, as in Thing and With	Well.
Ch, as in Church, and Sh, as in Shall	Well.
Nt, as in *Sent*	Well.

The conclusions that I arrive at from these two striking cases are these:—

1st. That the larynx is not only the generator of voice (so called), but the actual seat of vocalization for the vowels *a*, in all its forms, *i* long, *o* long, and the pure aspirate. Also the short vowels, which are also explosive, as *i* is in *sit*, *o* in *not*, and nameless one or urvocal.

2d. That these sounds receive a finish in the pharynx, nose, and mouth; with the exception of the pure breathing and the short vowels.

3d. The consonants are all made above the larynx.

4th. The vowel *e* long is made purely in the front part of the mouth, also the vowel *oo* and the diphthong *eu*, which is composed of these two elements,

5th. The short vowels (*e* in *met*) (*i* in *sit*) (*u* in *nut*) (*o* in *not*) can be made in the front part of the mouth.

6th. The urvocal can probably be made in several places from the larynx to the front of the mouth.

These propositions are nearly all mere statements of facts, but some are inferences.

The observation on Edward Larkin were made in the presence of my colleagues Drs. Casey and Carroll of St. Mary's Hospital, and also of Prof. Lattimore of the Rochester University. They were repeated on two occasions, a few days apart, but became after a short time impossible from closure.

Those on Mr. Matthews have been repeated on three occasions, within the last three months: on one in the presence of my colleagues in the Buffalo Medical College and several physicians and students of medicine, and on another, in the presence of Prof. Mixer of the Rochester University, and Prof. Palmer of the Normal School at Brockport—two gentlemen whose interest in the case arose from the fact, that they were the teachers of languages in their respective institutions. Doubtful sounds have been carfully excluded, and I feel sure that no observations have been retained which are not clear and decided beyond cavil. *The Medical Record.*

Darwinism in Reference to the Eyes of Animals.

Dr. B. Joy Jeffries made a brief verbal communication on the unity of design in the eyes of man and the lower animals.

In the Harvard University Course of Lectures on the "Anatomy and Physiology of Vision," which I am now delivering at Cambridge, I have had occasion to especially study the unity of design in the visual organs of man and other animals, and by means of my pictures and diagrams I trust to make this evident to the Society. As every illuminated point in nature sends out rays of light in all directions, we have only diverging rays, or those, which so far as the eye is concerned, are practically parallel. There is needed a refractive medium therefore, to bring such rays to a focus on the recipient surface, where the stimulus of light finally causes nerve stimulation, sending the sensation of light through an optic nerve, to the brain or its representative. We may take the human eye as the highest type, and here we have refracting media; namely, the convex cornea and double convex crystalline lens behind it, by means of which diverging or parallel rays of light are focussed on the recipient surface or retina, which lines the interior of the eyeball behind. Thus is formed what exactly corresponds to a *camera obscura*. We have refracting media in whose focus, or in the plane of whose focus, is placed a recipient surface, which recipient surface or membrane or retina contains the means or apparatus for causing the stimulus of light to give rise to a nerve sensation to be transmitted to the brain. Now all eyes, no matter what their external shape or appearance, if they answer these postulates may of course be ranked together as constructed on one design or plan. If we follow down the series of vertebrates we shall find these eyes all formed on this principle of the camera obscura. So also in the *simple* or *additional* eyes of the rest of the animal kingdom, we we shall find a refractive apparatus, in the plane of whose focus is a recipient membrane or retina. And this notwithstanding any difference in shape, size, or general appearance of the vertebrate eye, or the simplicity of these so-called additional eyes of the insects. The only other form of eye existing in the animal series is the *compound* or *facetted* eye of the insects and articulates. The common cornea of this eye is divided up into a large number of distinct facets, (five to thirty thousand), each one corresponding to a tube of pigment, so to speak, in which is found the final termination of the optic nerve fibre. The ray of light which enters through any one of the transparent facets can only affect the optic nerve fibre termination corresponding to it. Hence naturalists and philosophers seemed forced to accord to this form of visual apparatus a different method of perceiving light from that which prevails with the eyes formed on the principle of the camera obscura. Johannes Muller's dictum, more than anything else, seemed to render this an accepted truth. Long ago, however, the strangeness was pointed out of an animal having eyes near each other, whose methods of receiving and perceiving light were on two entirely different plans. Mr. Darwin saw at once this would militate against his theory, and comparatively recent research shows that it is not true. These compound or facetted eyes are also now found to have a refracting medium, in the plane of whose focus is a recipient surface corresponding to a retina. Each one of these facets is in reality a convex lens, and as an old anatomist said, "if we look at a man through these we shall see a whole army of dwarfs." There is, then, a picture formed behind them, just as there is a picture formed on the retina in the vertebrate eye. Moreover, behind each facet there is a refracting body which we will call the vitreous cone and however its shape and appearance may vary in insects and crustaceans, yet its purpose remains the same; namely, that of refracting the light, and together with the convex facet focussing it on the terminal end of the optic nerve fibre behind and in contact with the vitreous cone. Here, then, the stimulus of light produces excitation of a nerve to carry sensation to the brain, or its representative. The facet may represent the human cornea, the refracting vitreous cone next behind it, the crystalline lens, and if we should push back the final optic nerve termini by the interposition of a vitreous humor, the very shape would then resemble the vertebrate type. Thus, we find unity of design in all eyes, vertebrate, simple and compound. The question naturally arises, how can the insect see things singly if thousand of pictures of the same thing are perceived. The answer is that a single fibre supplies many facets, Moreover, eyes seemingly facetted or compound, are on examination, found to be groups of simple eyes close together. No objection has been made to an animal's seeing singly with several simple eyes when these are closely grouped, or to man's single vision with two eyes. A multiplied picture does not go as such to the brain.

Now then, where does light become turned into nerve stimulation. This takes place in the retina, for the optic nerve itself is insensible to light, and where it enters the eyeball is a blind spot in our field of vision. The retina is by no means simply a membranous expansion of nerve substance, but a most complicated structure. Without dwelling upon the arguments in proof I would simply say that its outer layer contains alone the percipient elements, called from their shape the rods and cones. These stand crowded together after the manner of a mosaic, at right angles to the black pigmented surface against which they lie, or rather in which they are bedded. The outer portion of these wonderfully minute little rods and cones is now found to be composed of a pile of plates of a refracting material separated by a less refractive intermediate substance, like a pile of glass plates separated by air. In contact with these come the ultimate fibrillæ of the optic nerve fibres, and in some way the action of the light streaming through this pile of plates stimulates the nerve to a sensation of light to go to the brain. This plated or layered structure of the rods and cones is universal in the vertebrate eye. The portion of the compound or facetted eye which corresponds to the rods and cones is the nerve substance, or its representative, behind the vitreous cone in the pigmented tube, and here also this plate structure has been found in the insects and crustaceans. Thus, then, not only are all eyes so formed as to be adapted to the same laws of light, in having refracting media, in the plane of whose focus a recipient organ turns light into nerve sensation, but the *percipient elements* of this receptive organ, the retina, are also the same, perfectly establishing the unity of design in all visual organs of men and lower animals.—*Proceedings of the Boston Society of Natural History,* 1871.

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We make the following extracts from a case reported in the June Number of the *Richmond and Louisville Medical Journal.* Our readers will notice that the tumor was removed by the method of enucleation recommended by us in Ovarian Tumors.

Removal of a Large Fibro-Cystic Tumor of the Uterus by Gastrotomy.

By T. Gaillard Thomas, M. D., Professor of Obsterics and Diseases of Women and Children in the College of Physicians and Surgeons, New York. Recorded by Dr. Matthew D. Mann, House Physician.

"E. K., aged twenty-eight, married, living in New Jersey, admitted to the Strangers' Hospital September 24, 1871. Patient has been married ten years, but never been pregnant. Her menses appeared at the usual time, and have always recurred regularly.

A year ago she noticed some swelling in the lower part of her abdomen, originating in the left side. This increased quite slowly during the first six months, and attracted very little attention. Since last spring the growth developed rapidly until its present size. Within a short time she has complained of dyspnœa or orthopnœa, of considerable pain in the back, and of marked debility.

On admission, patient weak but in good spirits; pulse over 100. The abdomen is distended but very tense; the umbilical depression not effaced. There is absence of resonance all over the front of the abdomen up to a point midway between the umbilicus and the ensiform cartilage, and distinct fluctuation. The tumor resembles in shape and size the uterus in the eighth month of pregnancy, and is supposed to be an ovarian cyst requiring immediate measures for relief, on account of the extreme tension and the pain which this induces.

Operation.—On the 25th of September, the patient having been etherized, the tumor was removed by Dr. Thomas, in the presence of Drs. Peaslee, Sands, Draper, Markoe, Brown, and a large number of students. An incision of three inches was made in the median line midway between the umbilicus and pelvis down to the sac. A sound was then swept around the tumor, which demonstrated the fact that it was free of attachments. The tumor was then tapped, and there flowed away about four quarts of a chocolate colored fluid, which was found to consist of bloody serum. The wall of the supposed ovarian cyst was found to be so very thick that, after removal of the fluid, difficulty was experienced in withdrawing the sac through the opening. This was, therefore, prolonged to five or six inches and the sac drawn out. To the surprise of the operator, it was found to be a sac with very thick walls growing from the fundus uteri, and disconnected with the ovaries, both of which were healthy. The only explanation which could be given of its developement, was that a tumor originally solid had undergone cystic degeneration or liquefaction in its centre, and thus taken on a cystic character. Hæmorrhage had unquestionably occurred within the sac thus formed, for a large amount of blood was found to exist in the fluid removed by tapping. The walls of this cyst was estimated as about half an inch thick.

The removal of the tumor presented great difficulties, for no pedicle existed. This was accomplished by that species of enucleation recommended by Dr. Miner, of Buffalo, N. Y. An incision having been made through the outer envelope of the tumor, the operator stripped this back on both sides, and by this means enucleated the tumor. From the walls of the enveloping sac thus left, a good deal of hæmorrhage occurred, but this was controlled by one or two ligatures, free application of solution of persulphate of iron and exposure to the atmosphere. The walls of this envelope of the tumor were then ligated by silk and returned to the abdomen. The abdominal wound was closed by silver sutures, except at the lower extremity, into which a small tent was inserted to facilitate drainage and washing out of the peritoneum, which the operator thought would almost assuredly be demanded.

8 P. M.—Patient recovers slowly from the ether; pulse 108; is kept quiet with morphine."

"Three months after the operation she presented herself at the hospital, looking fat and healthy. So changed was she in appearance that it was difficult ar first to recognize her."

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Editorial.

Ovariotomy,—Looking After our Laurels.

It will be remembered that a few months since, we noticed the favor with which our idea of enucleating ovarian and other intra pelvic tumors, had been received in England, and the success there attained by this method. We have recently received the new edition of Thomas on the Diseases of Woman, and are much gratified by the compliment paid enucleation in ovariotomy by this distinguished teacher and author. He says: "I have resorted to this method advised by Dr. Miner of Buffalo, N. Y., three times, with good results, in cases which would have proved unmanageable by other means. It appears to me to to be one of the most valuable of all the contributions to ovariotomy, which have emanated from this country." This endorsement of our suggestion first made to the profession not more than three years since, and the universal favor with which experts in ovariotomy have considered the novel, and at first startling proposition that ovarian and other intra-pelvic tumors could be removed without hæmorrhage, and without cautery, clamp or ligature; thus leaving no pedicle to treat, and avoiding many of the difficulties and dangers of the proceedure, has very naturally been a source of pride and pleasure. If our readers do not have quite so much interest in it as we do, we will gladly excuse them; if in ovariotomy they will try the plan by enucleation.

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Niagara County Medical Society, Old and New.

It appears from articles in the *Lockport Morning Times*, that the old Medical Society, organized in 1823, was declared in January, 1871, dissolved or disbanded. A new Society was then organized, new by-laws adopted, and officers duly chosen. It now appears that the Society will not remain in solution, and a call was made by twelve physicians of the county, members of the old society to meet at the Judson House Tuesday, June first. All regular physicians who have not done so, were invited to join the Society and take part in the election of officers.

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Books Reviewed.

Lectures on Aural Catarrh; or the commonest forms of Deafness and their cure. By PETER ALLEN, M. D., etc. New York: WM. WOOD & CO. 1872.

The author has presented us in this little work twelve lectures on the subject of Aural Catarrh, which we have no doubt will find a welcome reception by every physician, into whose hands it may chance to fall. The subject of Aural Catarrh is one that is but briefly spoken of in most of the text books to be found in the libraries of the general practitioner, and the monograph of Dr. Allen will supply a deficiency long felt by physicians, who have not had access to the more extended treatises on aural difficulties, and yet who are often called upon to treat this class of diseases.

The hope of the author that it may be of help in telling the physician "how to examine, what to look for, and where to find the disease, in a case of aural catarrh," is we think fully realised, and we look upon his work as a valuable guide to the general practitioner.

A Treatise on Diseases of the Bones. By THOMAS M. MARKOE, M. D., etc. New York: D. APPLETON & CO. 1872.

Prof. Markoe has given us in this work a very interesting and valuable treatise on diseases of the bones. The work is divided into three parts treating successively diseases of bone, tumors of bone, and malignant diseases of bone. Each of these subjects are treated in a very complete and satisfactory manner and are fully illustrated by cases from the extensive practice by the author.

Each subject is presented in plain and well chosen language, and can not fail to impress the reader that the author has a practical knowledge of what he writes.

The large amount of illustrative cases together with the allusions which are often made to the authorities on the subject of bone pathology give evidence that the author has carefully and in a large number of instances successfully put into practice the result of his investigation and discoveries in diseases of bones. The text is finely illustrated by numerous engravings many of them original, the book is presented to the profession in fine binding and clear type, and is an acquisition of real value in this branch of surgery.

Earth as a Topical application in Surgery. By ADDINELL HEWSON, M. D. With four photo-relief illustrations.

In 1869 Dr. Hewson, whose attention had been previously attracted to the disinfecting properties of earth as illustrated by the earth closet, conceived the idea of making use of this substance as a topical application to all cases needing such application which should come under his care during his term of service in the surgical ward of the Pennsylvania Hospital.

After making a thorough trial for six months of this dressing, in cases many of them which were as severe as usually fali under the observation of medical men Dr. Hewson was satisfied as to the value and utility of earth as a topical dressing in surgical cases.

Fearing however that he might be accused of being too hasty in his conclusions, he has allowed nearly three years to give his observations the benefit of further research and study. The result of this has been the production of a work showing the results of the application of earth in ninety-three cases, together with comments on the effects of the contact of earth, and modus operandi of earth, as a deoderizer and over puterfaction, in its effect on Living Parts.

We have been much interested in reading Dr. Hewson's book and shall look with interest for any further light, which may be thrown on the subject. The four illustrations which the book contains are finely executed and show a great advance in the art of illustrating books which we hope to see more fully introduced.

History of Medicine from the earliest ages to the commencement of the Nineteenth Century. By ROBLEY DUNGLISON, M. D., LL. D. etc. Arranged and edited by Richard J. Dunglison, M. D. Philadelphia: Lindsay & Blakiston, 1872. (By subscription only.)

This very interesting book comprises the substance of a course of lectures delivered by the late Prof. Dunglison, while connected with the university of Virginia.

The history of medicine is gradually traced from the earliest ages, when the healing art was surrounded with superstition and the mysteries heathen religion and pagan sacrifice, down to the periods of discovery and research, when the medical profession to a greater or less extent threw aside the covering of tradition and superstitious awe, and allowed the clear light of scientific research to shine through the darkness which had hitherto covered all that pertained to the art of healing. The errors into which the leading minds of the past were so easily led by following a theory or fancy, which had taken possession of their minds, to the exclusion of all other facts, and which was blindly followed by the deluded teacher and his disciples, without once pausing to investigate the cause or effect of the natural phenomena, which they were daily observing, is forcibly illustrated, and should teach a lesson to some of the men of our time who delight to, what is called in common language "ride a Hobby."

The men and teaching of the past are brought before us and introduced to our attention in the concise, brief and vivid language for which Prof. Dunglison is so well noted. The reader can neither grumble because the writer dwells too long on uninteresting details, or because he too briefly touches the important points of his subject. To all readers this volume will be a treasure; serving as a condensed history to the practitioner who has not the time or inclination to read more extended works and as a guide and incentive to further research to him who wishes to investigate more fully the details of medical history.

Dr. Rigby's Obstetric Memoranda. Fourth Edition revised and enlarged. By ALFRED MEADOWS, M. D. etc. Philadelphia: Lindsay & Blakiston 1872.

Memoranda on Poisons. By the late THOMAS HAWKES TANNER, M. D., F. L. S. Third and completely revised edition. Philadelphia: Lindsey & Blakiston 1872.

These two little books will be perhaps, more readily received by the student, who is preparing for examination, or who wishes to refresh his mind on some of the salient points without reading over the whole subject, than by the practitioner, who has or should have the whole subject stored up in his mind.

For any one however who is forgetful for the time being of some technical term, or especial position, or presentation in obstetrics Dr. Rigby's memoranda is without doubt just the thing to set him right.

Often in the hurry and excitement of the moment the young practitioner who is called to a case of poisoning is forgetful of the proper mode of treatment; to such no book of its size that we are acquainted with will be of more aid than the memoranda of poisons by Dr. Tanner. Although we should look with disfavor upon any physician who should be in the habit of relying upon any pocket aid to his memory, yet we can imagine of instances where in these little books would be of considerable aid.

Both books have been revised and to a large extent re-arranged and are presented to the profession in a very engaging form.

Parturition without Pain, a Code of Directions for escaping the Primal Curse. Edited by M. L. HOLBROOK, M. D , Second Edition. New York: Wood & Holbrook 1871.

Parturition without pain would indeed be a boon of inestimable value to mankind. The rules promulgated by the author for following a more Hygienic mode of living and dressing, if followed by the women of our land would, without doubt, produce more health and comfort if not less pain in child birth. The fashionable follies of the over heated drawing and ball room of late suppers and indigestible food, and the foolish and hurtful mode of dressing are slowly but surely producing their certain effects of weakness and disease upon the women of our day.

The rules given by Dr. Holbrook are plain and simple, and the results cited are truly encouraging, Yet without doubt no rules of this or of any other character are capable of abolishing pain from the lying in chamber.

Diseases of Women. By T. GILLARD THOMAS, M. D. Third Edition. Enlarged and thoroughly revised. With two hundred and forty six illustrations. Philadelphia: Henry C. Lea, 1872.

Thomas on diseases of women as offered to the profession in this, its third edition is the latest and best work in the English language, (or we believe any other language) upon this subject. We have taken great interest in carefully perusing its pages, and find that he has given his opinions without apparent bias, by what has been previously said either by himself or anybody else. If he wishes to condemn, he does so in a positive and manly way, and when he expresses opinions he carries conviction that he is correct.

The comprehensive character of work commends it to the profession, since nothing within its scope will be found wanting; it may truly be said to be complete in discussing every topic legitimately in this branch of practice. The older works upon diseases of women have proven almost obsolete, in the rapid process of this department of medicine. A few years makes it necessary to change much of the teaching or omit it altogether; revision of a work upon diseases of women has been a necessity. That it will be less necessary in the future, is quite improbable, since knowledge in this department is nearly all of it of comparatively recent date, and our present views and modes of proceedure will be modified by experience and by the correcting influences of time. Meanwhile the work of Prof. Thomas may be relied upon as containing what is known of the diseases of women.

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NEW BOOKS.—Authors and Publishers have been busily engaged during the past winter in getting their works ready for the public, and the result has been some very valuable and interesting works which have already appeared and others which will be ready in a short time.

Messrs Lindsay & Blakiston are about to publish several valuable and instructive works among which we notice a new edition of "Hewitts Diagnosis and Treatment of diseases preculiar to Women, and Clarks outlines of Surgery."

Wm. Wood & Co. announce a new edition of Holmes' System of Surgery in five volumes, illustrated. They will also shortly publish among others a new edition of Byford's practice of Obstetrics and of Loomis' Physical Diagnosis.

Among the works now going through the press of Messrs Lippincott & Co. we notice a work on Ovarian Tumors by W. L. Atlee, M. D. and Beck's Medical Jurisprudence.

A new edition of Watson's lectures on the Principles and Practice of Physic, and of Gross' System of Surgery, is to be published shortly by Henry C. Lea of Philadelphia. Mr. Lea has also in preparation several other valuable works on medicine and surgery.

Messrs D. Appleton & Co. have several medical works in press, including a treatise on Ovarian Tumors. By E. R. Peaslee, M. D., LL. D. A work on Diseases of the Ovaries. By Dr. T. Spencer Wells. And a Treatise on the Surgical diseases of the male genito-urinary organs, including syphilis. By W. H. Van Buren, A. M., M, D. and Edward L. Keyes, A. M., M. D.

THE PERIODICLES.—The *Atlantic Monthly* for July is replete with many interesting articles.

The departments of literature and science are each filled with vivid and pleasant discussions concerning the literature of the times and some of the recent discussions in science which have engaged the minds of scientific circles. Dr. O. W. Holmes gives part VII of his entertaining articles on the Poet of the breakfast-table. Mr. John A. Bolles, naval solicitor commences in this number an explanation of the reasons why Semmes of the Alabama was not tried.

We have missed the *Atlantic* from our table for some time and are glad to welcome back its smiling countenance.

THE LENS is the name of a new quarterly Journal of microscopy and the allied natural sciences, published by the state microscopical society of Illinois. Numbers one and two have already been published and present a fine appearance, containing many very fine articles on topics pertaining to microscopy. The Journal is ably edited by S. A. Briggs, office 177 Calumet Avenue, Chicago.

THE POPULAL SCIENCE MONTHLY. Messrs Appleton & Co. have commenced the publication of a new monthly under the above name. The magazine will be conducted by Prof. E L. Youmans, which fact alone will give assurance of its value. Among the list of contributors to the first number we notice the names of Herbert Spencer, R. G. Proctor, and others of scientific note. We have not had an opportunity as yet of seeing the Journal, but from what we hear of its worth wish it all success.

The late editors of the *National Medical Journal* announce that they will soon commence the publication of a new medical Journal called the "*Washington Medical Monthly.*"

Our valuable cotemporary and exchange the "*Journal of the Gynæcological Society*" has come to us since January with sixteen pages additional of interesting reading matter.

THE GLOBE MICROSCOPE.—We have received one of these little miscroscopes and are truly surprised at the magnifying power which they possess.

The above cut will represent to our readers pretty fairly the character and style of the microscope. Although not one of the kind which would be made useful by the professional microscopist, yet it opens up to the eye of the common observer a wide field of research in the minute world, and can not fail to be a source of amusement and instruction in studying the forms of world of minute life. They are manufactured by Geo. Mead & Co., of Racine, Wis,

WESTERN VIRGINIA STATE MEDICAL SOCIETY. The Medical Society of West Virgina held their session in Wheeling on the 5th, 6th and 7th of June. From what we can gather from the brief reports which have come under our notice, the session was a profitable and interesting one. The difficulty with the late secretary Dr. James Reeves was adjusted to the satisfaction of all by a letter of apology from that gentleman which explained some things which had not before been understood. After listening to an able valedictory address by the president, Dr. Lazzell, the society adjourned to meet at Parkersburg, Mineral Wells on the first Wednesday in June 1873.

Mortality of the United States by states and territories, with distinctions of sex and percentage of deaths to population from the censuses of 1870, 1860, and 1850. Washington 1872 government printing office.

The value of these tables will be readily understood, when we are told that they distribute nearly one half a million of deaths, by age, sex, color, nativity, occupation. and month of death, according to disease. These tables are to be preceded in the full volume by the percentage tables and remarks; they will also be followed by the statistics of the Insane, Blind, Dumb, &c. &c. We have been interested and instructed in looking over these tables and have no doubt, but that they will be of much value to the medical profession, when issued in their complete form.

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Books and Pamphlets Received.

Report to the Surgeon General of the United States Army on the minute Anatomy of two cases of Cancer. By Assistant Surgeon J. J. Woodward, U.S. Army Washington D. C. 1872.

Catalogue of the Library of the Surgeon General's office, United States Army. With an alphabetical index of subjects. Supplement to catalogue of Library of Surgeon General's office No. 1. List of American Medical Journals.

Amnesic and Ataxic Aphasia with Agraphia, and temporary right hemaplegia, the result of embolism of the left middle Cerebral Artery. By T. M. B. Cross, M. D. Reprinted from the American practitioner for April 1872.

The Correct Principles of Treatment for Angular Curvature of the Spine. By Benjiman Lee, A. M., M. D. Philadelphia: J. B. Lippincott & Co. 1872. Buffalo: Breed, Lent & Co.

Half-hour Recreations in Popular Science. Dana Estes editor. No. 4. spectrum analysis discoveries. Showing its application in microscopical research, and to discoveries of the physical constitution and movements of the heavenly bodies. From the works of Shellen, Young, Roscoe, Lockyer and others. Boston: Lee & Shepard, 1872. Buffalo: Martin Taylor.

Autumnal Catarrh (Hay Fever) with three maps. By Morrill Wyman, M. D. New York: Hurd & Houghton, 1872. Buffalo: Martin Taylor.

Doctor in Medicine and other papers on Professional subjects. By Stephen Smith M. D. New York: Wm. Wood & Co. 1872.

Minutes of the twenty-third annual meeting of the American Medical Association, held in Philadelphia, May 7th, 8th, 9th, and 10th, 1872. Wm. B. Atkinson, M. D., Secretary 1400 Pine street, Philadelphia, Pa. (Price 50 cents.)

BUFFALO
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Original Communications.

ART. I.—*Suits for Malpractice.* (President's address to Monroe County Medical Society.) By H. F. Montgomery, M. D.

In accordance with a requirement of the By-Laws of this Society, the presiding office before retiring, delivers a discourse upon some subject pertaining to the art which we practice.

The topic now selected for consideration is one of great interest to every member of our profession. I allude to the prosecution of medical men for so called malpractice, and to the testimony of physicians *against* the defendants.

In looking over the older law reports such a case is rarely found; of late they have become frequent. At nearly every sitting of the court one or two such cases are on the calender. It is, too, a remarkable fact that the trials generally result adverseiy to the surgeon. It has become so great an evil that a remedy should be found. The evil and injustice to the surgeon is great, after weeks of anxiety and labor over an intractable case, the deformity is not removed, and with all his skill and care, cannot be removed. Then follows a long and harrassing trial for damages at a great cost and loss of time, however the suit may be determined.

There is the further evil that the indigent are deprived of the gratuitous services of the surgeon of experience and skill, the reason is obvious; to the ignorant, the failure to restore the injured limb to its original perfect condition is evidence of want of care, or want of skill. Acting on this idea, the unfortunate subject on an imperfect recovery, commences suit. What surgeon knowing the result of certain recent trials would have the temerity to undertake the treatment of a pauper for a compound oblique fracture of the tibia and fibula near the ankle joint? The reason for the increasing frequency of these trials is the almost uniform pecuniary success of the undertaking. Then comes the inquiry, why this successful issue to these trials? and what is the remedy? It is not the fault of the law. The principles of law upon which these suits are brought are sound and just. The great difficulty and main cause for the unjust termination of these cases is that the judges do not clearly understand the nature and character of these injuries, or the difficulties of the diagnosis and treatment. This ignorance on the part of the court arises from the carelessness, or bias, or other fault (perhaps want of candor) of medical witnesses. The law does not hold a professional man responsible for an error of judgment, but for gross ignorance or for carelessness. A member of the medical profession who has a diploma from a recognized Medical College, or whose reputation and standing in his profession is good, is not grossly ignorant. If such a person gives his best efforts and care to any given case he is not responsible for the result, whether it is good or bad. He does not agree when he takes charge of a case to be equal to the best or highest in his profession, but with ordinary skill and care to give his best efforts to relieve his patient, and having done this he is not responsible. The highest skill is not attained or attainable by knowledge or learning, or by experience even, but it is the gift of the few, it is genius. This is not only true in surgery, but in all the arts. The largest portion of laborers in any calling or profession are not distinguished for anything except for their want of distinction.

He who is the subject of injury, and who living remote from the great centres, wishes surgical aid, if he wants the best, must send *away* for it. Such a man, who with a broken or dislocated limb sends for a professional man in his neighborhood, knows that by sending further and paying more he can have the attendance of surgeons of greater skill, of men celebrated for their skill. This only the few can afford. He sends for his family physician who gives him honestly and fairly his best skill and care. The case may recover with deformity, even great deformity, and admitting that it might have done better in more skillful hands, the medical attendant is not and ought not to be liable to damages for the result. The fact that the result was not favorable, is not even presumptive evidence of want of skill or want of care, but on the contrary it is presumptive evidence that there was something obscure and only discoverable by the highest skill or by a post-mortem examination or that the difficulty was irremediable. The plaintiff must prove his case, that is, he must prove ignorance or carelessness on the part of the defendant, and if he does not, the judge ought to grant a non suit. If the plaintiff does not show that the defendant was guilty of gross ignorance or carelessness, he has not made out his case and there is no question of fact for the jury. In fact, in these cases no question ought to be submitted to the jury, until gross ignorance or carelessness has been established to the satisfaction of the court No professional man can practice with safety to his purse or reputation under any other rule of law. The propriety of his practice in detail, whether he did this or that or whether he did not, is not a question for a jury, who are entirely ignorant of the whole subject, to determine. If the court could distinctly understand, that when a surgeon comes to examine an injured limb, it was not a matter of knowledge that was to determine the extent and nature of an injury, but an opinion or judgment only, then the court would know whether or not the plaintiff had established his case.

Neither the lawyers, nor the judges, nor the jury, nor the patients understand this. They think that the surgeon's knowledge of anatomy enables him to know and demonstrate the exact amount and character of the injury. In this they are in error. The surgeon examines an injured limb or joint covered with muscles, skin and fat; into these substances there has been, by the time the surgeon sees it, blood and serum poured out to a greater or less extent, and the parts have become extremely sensitive. The surgeon cannot see the injured bone or joint, and covered as it is, with a cushion such as I have described, he can not distinctly feel the part. He can observe deformity and perhaps detect crepitation, and perhaps not. It is not a matter of knowledge, but of opinion, what is the character, nature and extent of the injury, and what is best to be done under all the circumstances. There may be fracture of the bone which produces the deformity, or the deformity may be the result of a dislocation, or the deformity may be the same in appearance or to the touch without either fracture or dislocation; as it may be produced by the effusion of blood and serum and rupture of soft parts. Which of these it is, is not a matter of demonstration but of opinion formed from many circumstances, often very occult and impossible to determine with certainty. To err in the conclusion to which the surgeon may come is not gross ignorance nor carelessness, though some other surgeon might have judged more correctly. There may be a fracture and a surgeon of skill may not find it. There may be dislocation and a surgeon of skill and experience may not detect it. This being admitted (as it will be by every surgeon of experience) a bad result is not evidence of ignorance or carelessness. In any case, when there is a difference of opinion between professional men of good and respectable standing as to the nature of the injury or as to the particular treatment, then the surgeon, charged with want of care or skill, is not responsible and the plaintiff has not established his case and should be non-suited. Another reason for the unfortunate result of these trials is the want of care and caution on the part of the medical witnesses. In giving their evidence as experts, they often give opinions without sufficient facts upon which to form an opinion and speak more confidently than the facts will warrant. They also in testifying to treatment define their own peculiar treatment as the only correct one, and any deviation from that as bad. This conveys the impression to the judge and jury of a certain fact instead of an uncertain opinion. I will endeavor to show the correction of the above conclusions by a partial report of a recent trial.

Dr—has three times been defendant in a suit for damages for not permanently restoring a dislocation at elbow joint. He attended the patient five days and then discharged himself, leaving the patient in the hands of the family physician, a homeopathist. When Dr—first saw the case he pronounced it a dislocation of both bones of fore-arm backward and as he supposed reduced the displaced bones. After several weeks the bones were found not to be in place and the patient called in another surgeon and the bones are not now in place. On the first and second trial the plaintiff undertook to show that by want of skill or care Dr——had failed to reduce the dislocation and that it had not as defendant claimed been re-dislocated after he left it.

By all the medical witnesses the plaintiff showed that re-dislocation of both bones of the fore-arm backwards, where not complicated with fracture, was very rare, so rare that most of the medical witnesses had not seen or heard or read of such a case, and yet on the third trial of this case the plaintiff's attorney changed his ground and proved by the same witnesses, that re-dislocation was so probable and so much to be feared that the omission to put a sling upon the patient's arm when lying in bed with the arm and fore-arm upon a pillow, was want of care, and the reason why it had become displaced again.

Is it not obvious that an arm and fore-arm imbedded in a feather pillow with the fore-arm at a right angle, with the arm when the patient is in bed and the pillow at his side, is more perfectly at rest and less likely to move than it would be restrained merely by a sling? Let him who doubts try it.

On the second trial one of plaintiff's medical witnesses is reported to have testified, folio 701–708. "I don't believe it was dislocated a second time" (would it have any different appearance after re-dislocation than after the priminary dislocation?) same witness, "it was put in this position where it could not have got out, without a fracture." At folio 193 the same witness testifies as to re-dislocation. "It is the most impracticable thing of any of the joints that are endowed with as much motion as that," again at folio 212 the same witness testifies in answer to the question, "if the patient was going to bed would you use a sling?"—"yes sir." At folio 235 same witness. "The elbow joint, is a joint that is so little likely to get out that, the surgeon don't think it necessary to use a splint." Another witness testified for plaintiff, folio 259; "I will premise by saying that it (re-dislocation) is not a very common thing in this joint, but it does occur. Folio 417, 418, same witness in answer to question, "would you regard a sling to be necessary?" "not positive.

ly so." 423, Question: "Is it liable to get out of that position, that angle?" same witness answered, "certainly, there is no objection to it,"(the position upon the pillow,) "if the patient would keep very still and keep it there." The judge in refusing to grant a non-suit said, folio 326, "Assuming that he did set that arm, he did not as I understand the physicians here to say that he should have done, put it into a sling." One of plaintiff's witnesses, folio 254, testified that when he saw plaintiff and examined the arm, several weeks after the injury, that he was not able to tell whether this dislocation had been complicated with fracture or not. On the third trial this same witness testified, folio 411–412 in answer to a question, "could you at that time (when he examined the arm several weeks after the injury,) have discovered whether there had been a fracture of the coronoid process?" "I think I should have been likely to have discovered it, though I know very little about that."

This witness testified on the second trial, folio 269, that in case of fracture of coronoid process, " a careful examination of it would discover this grating which is called crepitus," and that that discovery would be apt to be made by a skillful physician.

One of the witnesses for the defence, folio 319, testified that when the bones are reduced, the joint retains its position generally, if it is kept quiet. Another witness for defence, folio 569, to the question, "what do you say in relation to putting it in a sling" answered, "If the intensity of the inflammation was excessive, and the person was going to lie on their back in bed, the best position would be to put it as Dr—— did, on a pillow, *** as long as the person is lying in bed, I think the position on the pillow is the easiest for the patient, and there is no voluntary motion in a part that is painful, the pain in moving it would induce the patient not to move it." Folio 583, same witness, "I think after a simple dislocation, subsequent dislocation of it is rare." Folio 577, same witness as to fracture of coronoid process, question: "Can the parts be brought into contact so as to discover crepitus?" "I infer not always."

I give the above extracts from the printed report of the trial as specimens of the evidence. On the first trial the jury did not agree, on the second and third the verdict was in favor of plaintiff. There was so decided a difference of opinion upon the main point in this case among the medical experts, that I wrote the following letter to six distinguished professors of surgery. Five of them did me the favor and courtesy to answer my letter, and have thus placed me under obligations to them. I will state the question and the several answers:

(Copy of Letter.)

ROCHESTER, N. Y. April, 1870.

DEAR SIR: At a recent trial for malpractice in this state, the case turned upon the answers to the enclosed questions. Can you give me your answer to these questions? I wish by you to confirm or not my evidence given upon the trial.

Signed, Yours truly,
H. F. MONTGOMERY, M. D.,
Surgeon Rochester City Hospital.

QUESTIONS.

1st. In a case of dislocation backward of both bones at the elbow joint, not complicated with fracture, the result of a fall from a runaway horse, in a female, would it be proper treatment, immediately after having reduced the dislocation, to place the patient on the back in bed, with the arm and fore-arm upon a pillow at her side, with the fore-arm at about a right angle with the arm?

2d. Would it be necessary upon such a patient so placed to put a sling around the neck and fore-arm, to prevent a re-dislocation?

The above letter and questions were sent (with the names of the following professors of surgery) to each of these gentlemen:

To Prof. FRANK H. HAMILTON, M. D., New York.
" " HENRY H. SMITH, M. D., Philadelphia.
" " WILLARD PARKER, M. D., New York.
" " ALFRED C. POST, M. D., New York.
" " THOMAS M. MARKOE, M. D., New York.
" " JAMES H. ARMSBY, M. D., Albany.

Below I give the five answers received from five of the six gentlemen to whom I wrote. These answers are *not* given in the order of the above list, as I have not had their consent to this publication.

Copy.

April, 1870.

DR. H. F. MONTGOMERY, Rochester City Hospital.

DEAR SIR: In reply to your note of 14th inst. to day received, asking my opinion on the after treatment of luxation of both bones of fore-arm backwards. I would state that I am unable to reply to a special case, as swelling, &c., *might* render confinement in bed with the arm flexed on a pillow appropriate treatment. But unless there was contusion tumefaction &c. I generally apply a roller *lightly* from fingers to middle of arm or higher and then an *angular* splint (flexion) to front of fore-arm and arm as in fracture of condyles, making passive motion subsequently.

Respectfully Yours.

Copy.

April, 1870.

MY DEAR SIR: In a case such as you describe, of dislocation of the elbow in an intelligent adult, who understood the importance of keeping the joint quiet during the healing of the lacerated structures, I should think that the position you describe would be quite sufficient as a plan of treatment to secure a good result. This I should think would be particularly the case with the elbow in which joint, from its ginglymoid character, re dislocation would not easily be produced. In a child or a restless intractable patient of any age I should think a sling very important.

Very respectfully your obedient servant

Dr. H. F. MONTGOMERY, M. D.

(Copy.)

April, 20th, 1870.

H. F. MONTGOMERY, M. D.

DEAR DOCTOR: In answer to your first question I reply that in the first place a patient is not necessarily confined to bed after reduction of dislocation of the elbow; and secondly if the patient be placed in bed the fore-arm and hand should be placed across the chest rather than by the side of the patient. The fore-arm should be bent at a right angle with the arm. In answer to your second question I reply that the fore-arm and hand should by all means be supported by a sling even in the recumbent posture, especially during the hours of sleep. An intelligent person, when awake might be trusted without the sling while in the recumbent posture.

But if he should fall asleep without the support of the sling, he might make some unlucky movement which would endanger a reproduction of the dislocation.

Yours sincerely.

Copy.

April 11th, 1870.

DEAR DOCTOR: I have received yours, and in reply I have simply to say that when the bones are reduced the fore-arm must be maintained in nearly a right angular position with the arm.—2d. This indication is met by resting the arm and fore-arm upon a pillow when in bed, and by supporting the fore arm and hand in a sling when sitting up or standing, and hence the sling is unnecessary while lying in bed.

Yours Truly

H. F. MONTGOMERY.

Copy.

April 17th, 1870.

DR. MONTGOMERY.

DEAR SIR: As you will see by reference to interrogation, No's. 1 & 2, I have answered them respectively yes to No. 1. and no to No. 2. I may add that having reduced such a dislocation, I ordinarily adopt no precaution to prevent a re dislocation. I will not deny the possibility of its becoming spontaneously displaced, but if it does occur it is so rare that it has never happened to me, although I have reduced a great many in my life.

Very Truly Yours,

It will be observed that these distinguished teachers of modern surgery are nearly equally divided upon this question of the use of a sling in bed. Three of them answered the question as did the medical witnesses for the defence and two were with the witnesses for the plaintiff. Is it not preposterous, to ask a jury of twelve farmers to determine which of these learned and experienced professors are correct in their practice. Its absurdity seems to be apparent. If this decision of the court is sustained by the court of errors, where the case is to be argued, it will not be safe to practice any profession, much less surgery. The plaintiff did not show by the evidence that Dr—was greatly ignorant nor did they show him careless—on the contrary the evidence showed the extreme of care, for he called in counsel to see the patient twice during the five days that he was in charge of the case. He told the patient the first time he saw the case what the injury was, and he reduced the dislocation as he supposed and believed. If he was mistaken it was no more than has happened to surgeons of greater fame and of larger experience. If it became displaced after he left it, he cannot be called upon to show how or why that occurred. It might have been from fracture of the coronoid process or from some complication unknown and not discoverable during the life of the patient. Lord Mansfield the ablest chief justice of the King's bench used the following language as to the responsibility of professional men. "Attorneys who conduct themselves with honor and integrity ought to be protected, when they act to the best of their skill and knowledge. Every man is liable to errors and I should be very sorry to think that it should be taken for granted that an attorney is answerable for every error or mistake and to be punished for it by being charged with the debt he was employed to recover."

In the case of Percy v. Milloudon, Louisiana Reports No. 8, New Series.—Porter J. remarked: "It has been said that it will not be sufficient for a professional man to say he acted to the best of his abilities, because he should have formed a more just estimate of his own capacity before he engages himself. This doctrine, if sound, would make an attorney responsible for every error of judgment, no matter what care or attention he exercised in forming his opinion. It would make him liable in all doubtful cases, where the wisdom or legality of one or more alternatives was presented for his consideration, no matter how difficult the subject. But when a person who is appointed an attorney has the qualifications necessary for the discharge of the ordinary duties of the trust imposed, we are of the opinion, that the occurrence of difficulties in the exercise of it, which offer only a choice of measures; the adoption of a course from which loss ensues, cannot make the agent responsible if the error was one into which a prudent man might have fallen. The contrary doctrine seems to suppose the possession and requires the exercise of perfect wisdom. No man would undertake to render a service to another on such severe conditions."

E. Darwin Smith, Judge of the Supreme Court of this State, on an application for a new trial by Dr——gave the following written opinion.

Copy.

SUPREME COURT.—Monroe General Term.

December, 1869.

Present, E. Darwin Smith, Dwight and Johnson, Justices.

E. DARWIN SMITH, J.

"The motion for a non-suit made at the close of the evidence in this case I think should have been granted. I was strongly inclined to grant this motion at the trial, but thought the jury might probably find for the defendant, which would end the litigation. The principles governing the case were I think in substance correctly stated to the jury."

"There was no basis for a recovery on the ground of malpractice. On the question, of negligence upon which the case was submitted to the jury, there is not I think, upon a careful consideration of the question really any sufficient evidence to warrant the verdict. The defendant, as the proof shows, clearly possessed the ordinary skill of his profession and exerted such skill to the best of his ability. He attended the plaintiff in an emergency, and attempted to reduce the dislocation after several other physicians of the village where he resided had refused to do so. He did his best to reduce the dislocation and supposed he had effectually done so. He gave the proper directions in regard to the patient and left. He visited her the next day with Dr—— another physician and surgeon of the same village, when they both made examination and found and decided that the dislocation had been reduced and the bones of the arm were in their proper places. He visited her again after a day or so and saw her often afterwards. If the dislocation was not in fact reduced in the first instance, it is quite clear that the defendant supposed and believed it was so reduced and so also did Dr—— who examined the arm carefully the next day, after the dislocation and the attempted reduction and said at the time that the bone was in place. If there was mistake on this subject, it was not the result of a hasty inconsiderate attempt or opinion of the defendant. He clearly exercised his best skill, care and judgment, what more could he do? what more could be required of him? The call to his aid and advice of Dr.——an older physician of forty years practice, the next morning confirms this view and shows that he was anxious to do his duty and do the utmost that his skill and knowledge and efforts could effect for the plaintiff. Under such circumstances I cannot think the defendant was responsible for the consequences resulting to the plaintiff from this dislocation. He was not and is not an insurer, such was not his contract. He did not guarantee a cure or undertake that the plaintiff's arm should be restored to its former state of soundness. No man can safely practice surgery, or medicine, if a surgeon can be made or held liable to respond in damages in a civil action for a failure to restore a limb or to effect a perfect cure under such circumstances. The contract of a physician and surgeon is that he possesses the ordinary skill of his profession and that he will exercise and use such skill to the best of his judgment and ability, and with due care to ensure the cure of his patient. When he has done this his duty is fulfilled. A physician and surgeon should not be liable and mulcted in damages except in a clear case of malpractice and gross negligence, and negligence should not in such cases be implied or imputed upon the slight or uncertain evidence which is often applied in suits against corporations or wrong doers. Physicians and surgeons practice their profession under circumstances of great trust, painfulness and responsibility, and it is not right to super-add to this burden of care and duty and danger, the peril of a law suit with the right of recovery for every mistake or error of judgment which they may, and must unavoidably commit. The law is not so unjust and so unfriendly to the medical profession. I think there should be a new trial with costs to abide the result."

E. Darwin Smith.

The above opinion is all that we could ask of the court, and yet upon the third trial the presiding judge refused to grant a non-suit and for the second time the jury rendered a verdict against the defendant for large damages. It is to be hoped that a higher tribunal (before which this case will soon be brought) will give to surgeons the benefit of the same just rules laid down by Lord Mansfield and Judge Porter as applicable to attorneys.

We have however a remedy which depends upon ourselves. We can arrest this growing evil, if we weigh our evidence and not be led to emphasize it on this side or that as the attorneys in the case may wish. We ought to instruct the court that surgery is not an exact science nor a perfected art. That deformity more or less is the rule after fractures and frequently after dislocations, and that as to the detail of practice in any given case the surgeon in attendance must be the judge as to what is best to be done. He only can know the condition of the patient and form any correct opinion of the extent and nature of the injury to the tissues, and how much and how little pressure they will bear. That inflammation and swelling may be so extreme that a bandage of any kind would be detrimental and might even produce mortification of a part or of the entire limb is known and admitted. The medical expert should have a constant and sensitive regard for the reputation of his professional brother. If we expect the confidence of the public we must command it by our respect for each other. Especially should we guard against the natural tendency to magnify our own peculiar opinions. In giving an opinion from the witness stand we should insist upon stating when ever it could be done with truth, that though the opinion given is decided, yet that a different opinion or plan of treatment is held or pursued by able men in the profession. We should further instruct the court and jury that no two cases of disease or injury are precisely alike, and that writers on surgery or medicine in giving the treatment for any case or class of cases only undertake to give the general principles of as applied to ordinary cases, and that exceptional cases are of daily occurrence. Since this paper was first written this case has been carried to the Supreme Court on a bill of exceptions for a new trial. The application was denied. The following extract from the opinion of the court (Mullen P. J.) shows how difficult it is to make a lawyer or the court understand a surgical case, and how imperfectly the opinions of the profession are brought out before a court and jury.

Opinions of MULLEN P. J. extract from.

"The Surgeons disagreed as to the necessity of putting the arm in a sling after the dislocation is reduced, some insisting that it is necessary in order to prevent a re-luxation which might occur if the arm was left without using this means of preventing it, while others insist that it is enough to leave the cure to nature, the surgeon merely applying or directing the application of cold water to the limb in order to keep down inflammation. The defendant did not use a sling and it was for the jury after weighing the reasons assigned by the surgeons, for and against the use of it to say, whether it was negligence in the defendant to omit it."

"The defendant's counsel insist that, as it is shown, that surgeons do not agree in regard to the propriety of the use of the sling, the jury were not at liberty to find there was negligence on the part of the defendant in omitting it. I cannot assent to this proposition thus broadly stated. If writers on the treatment of dislocations, or, if in the absence of such authority, practical surgeons prescribe a mode of reducing them, and ot treating them, and of treating the joint after the bones are replaced, it is incumbent on surgeons called to treat such an injury to conform to the system of treatment thus established, and if they depart from it, they do it at their peril."

"In 2d Espinassis N. P. 601 it is said, it seems that any deviation from the established mode of practice, shall be deemed sufficient to charge the surgeon with negligence in case of an injury arising to the patient. If, however, it is shown that surgeons have applied a different system of treatment and found it to succeed as well or better than the one prescribed, it is not negligence to resort to the system, thus practically tested. But before the new practice can be used to shield the surgeon from the charge of malpractice, it must appear that the cases in which it was tested were substantially the same as those treated of by the writer or with those treated by practical surgeons, and that the treatment thu resorted to has been successful in so many instances as to establish satisfactorily the propriety and safety of adopting it. The question is as a general rule exclusively for the jury and in this case it was peculiarly so.

If in case of dislocation of the elbow joint it is enough for the physician to replace the bones and to put the arm on a pillow with the part below the elbow joint at a right angle with that above it, and directing the application of cold water, it would seem to be proper if not necessary that the attending surgeon should inform the patient or those having charge of him or her, of the necessity of maintaining that position, and if there is a tendency in the limb to become straight, or if in consequence of the severity of the injury to the ligaments about the joint, there is great pain which renders the patient nervous and restless, thus increasing the tendency to re-luxation or to straighten, and as a consequence to stiffen the joint, the danger should be disclosed, to the end that all proper precaution may be taken to prevent it. The defense insists that these dangers were emminent and yet no word of warning was given. This was in my judgment culpable negligence; much of the suffering the plaintiff has undergone, and much of the loss he has sustained, might have been prevented, had the defendant done what it was clearly his duty to do, if he knew the consequences which might result from re-dislocating the joint or straightening the arm. It would seem to me that a sling would have in some degree mitigated if not altogether prevented the misfortune which has befallen the plaintiff."

The honorable and learned judge has much to say about authorities, and yet ignores the fact that the medical witnesses on the trial were authority, and the only authority recognized by the courts, and that in fact the practical surgeon of learning and of successful experience is better authority than or at least as good as any written authority. Placing the arm on a pillow when the patient is in bed was correct treatment according to authority and was not new treatment, and it was not shown to be the cause of the injury to the plaintiff, and consequently the case above quoted by the learned judge does not apply to this case. Several witnesses stated that the treatment was proper, and Ferguson, author of a work on Surgery, states page 117, "In dislocation as soon as reduction is accomplished the need for the surgeon has almost ceased—the act of reduction seems the chief part of his duty, and moreover it may be said that, in general it is the only occasion on which any active interference on his part is required."

The learned judge has decided that when the practice of different surgeons on any particular case differs, it is for the jury to say whether the following of one or the other plan is want of care or skill and consequently malpractice. The learned judge must be in error. It has not been so held in other professions and should not be in surgery. The learned judge argues the case as if placing an injured arm upon a pillow was unusual practice. Every surgeon knows that this position is the usual and best position for some of the severest injuries to the elbow joint or fore-arm. It is the position which preserves the member most perfectly from the least motion. Voluntary or involuntary motion of a limb so placed, whether the patient is awake or asleep, is prevented by the *pain* which motion produces and by the trough formed in the pillow by the weight of the limb. This position allows less motion of the joint than when the arm is supported by a sling in a person sitting up or walking about. The sling is directed to be used by a person standing or walking. The arm upon a pillow is the position for one so injured as to lie down or who needs perfect rest of the joint and when the swelling or inflammation renders bandages and splints injurious and painful and dangerous to the vitality of the injured limb. In such a case it is the common practice of the profession and it is the only proper practicable position. Whether any particular case is one of this character, can only be determined by the attending surgeon. If he errs it is an error of judgment and he cannot be held responsible. This case is soon to be argued before the Court of Appeals of this State.

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ART. II.—*Abstract of the Proceedings of the Buffalo Medical Association. May 7th*, 1872.

Members present: Drs. Cronyn, Wycoff, Hauenstein, Little, Diehl, Strong, Bartlett, Sloan, Barnes, Phelps, Johnson and Ring.

Dr. Cronyn in the chair. On motion the reading of the minutes was dispensed with.

Dr. Hauenstein moved that the proceedings of one meeting be read at the meeting, after which they could be published. Carried.

Dr. Strong as chairman of the committee to present a memorial to the city authorities, asking for a report of the board of health, reported that such a memorial had been presented, and they had the assertion of Dr. Stork as to its propriety, and he in this cursory manner promised to use his influence to have such a report made for 1871, and the committee think it will be published.

Dr. Wyckoff moved that the report be accepted and that the committee be discharged. Adopted.

Dr. Cronyn.—The prevalence and fatal nature of what is called indifferently, cerebro-spinal meningitis or spotted fever, attracts the attention of the profession just now, more especially as there are very discordant views with regard to its pathology and treatment. Without entering into the opinions of others as to what they think it and why, I will very briefly state my own. I consider it accurately described by Trousseau in his "cerebro-spinal typhoid." The mode of attack is very generally the same in all cases, though some are not so violent as others; e. g. in one case, vomitting and purging with violent headache and opisthotonos are present from the beginning, lasting one or two days; in another, vomiting, headache and excruciating pain of back, resembling the accession of variola, are present for the first twenty-four hours. Again only violent headache and general malaise for the first thirty-six hours, when severer symptoms set in as opisthotonos, difficulty in deglutition, dry brown tongue, delirium and if the bowels were loose at first, they become constipated, if constipated, they become loose, the discharges having a *true* typhoid character. In all the cases that I have seen, three distinct stages could be marked: the first and shortest being one of great excitement and pain; the second of coma or semi-coma and less delirium, with the cervical muscles in painful contraction; and third great exhaustion, accompanied with gastro-intestinal epithelial exfoliation and diarrhœa.

In this cursory description of the disease as I see it, it may be asked how I can account for the suddenness of attack and of death in many of the cases, as they do not pursue the ordinary course of typhoid, nor do they seem to have the same etiology, and they do very closely correspond to Niemeyer's description of cerebro-spinal meningitis. Now I believe that many of the suddenly fatal cases reported were malignant variola, and if they were not, a sudden and fatal termination with a form of typhoid, which I think prevails, is not uncommon. Why, in the ataxic form of Trousseau, many features of which are common to that under discussion, patients are "killed as if by a thunderbolt! Thus therefore there need be no question as to its typhoid character, because in this particular, of sudden death, it differs from the ordinary course of that fever. In its etiology, to my mind, the resemblance to typhoid is even more marked, as in every instance which came so far under my notice, it was distinctly traceable to the ingesta, whether of food or water, but of the latter more particularly; and where it failed to correspond with the elaborate description of Niemeyer in the only typical case of which an examination post mortem was had, no *lesion* of the brain or spinal cord was found.

The indication for treatment is too plainly deducable from this view of the pathology of the disease and need not occupy our time.

Dr. Strong said he was gratified to have Dr. Crouyn's observations confirm his own conclusions. He considered the term *cerebro-spinal meningitis,* as applied to the disease, somewhat prevalent this winter and spring—a *misnomer,* certainly as applied to most cases. He could not say how it came to be considered a meningitis,—except perhaps it be the occipital and cervical pain together with the somewhat distinctive contraction of the posterior muscles of the neck—neither of which can be taken as conclusive of meningeal inflammation.

In my observation, so far as the pain is concerned, it is far more neuralgic than inflammatory, and as to the muscular contraction, of course that does not imply inflammation.

In one of my most typical adult cases, while there was the usual occipital and cervical pain, by far the severest suffering was from pain in the *calves of the legs* and especially the *poplitial region*; there it was simply intense, extorting the sharpest outcries from one little accustomed to give vent to her feelings. She spoke of it, as feeling as if the *bone would burst.* It was paroxysmal, not attended with swelling, and was clearly neuralgic. It only yielded to grain doses of morphia, which also relieved the pain in head and neck. This, with quinine, iron and gin, to speak briefly, was the sum of treatment, under which the disease after five or six days culminated.

What else, whether we regard the symptoms or treatment, could it (the pain) have been, than an aggravated neuralgia? In another case of a boy of three and a half years, with similar pain in head and neck and with still more marked rigidity and contraction of posterior muscles of the neck, the symptoms yielded to substantially similar treatment.

Indeed this treatment essentially,—though from being out of the city much of the time I have not seen a very large number of cases,—has been effectual in subduing the disease in most of my cases.

The treatment, to speak of nothing farther, to my mind is conclusive against the nature of the affection being regarded as a meningitis. The conclusion seems legitimate and logical, that this designation for such cases, is a misnomer. But I go farther and say that so to regard it is a pernicious delusion, for the obvious reason, that it suggests and prompts on the one hand, to active measures, that in the nature of the case must be pernicious and on the other hand ignores, those, the omission of which is but little less so. So to regard it therefore, leads us to the twofold offenses of commission and omission. If this view is tenable, why longer cling to the misleading designation, cerebro-spinal meningitis?

The term spotted fever, has the merit of not being positively mischievously misleading. At the same time it seems to me a rather stupid term for this disease in as much as the spots called for, are in my experience comparatively rarely seen, and never after the first day or two. It may have to be endured till we devise a better one. I shall be glad if *The Buffalo Medical Association* can have the honor of leading off, not only in discarding a mischievous designation, but in suggesting one, which shall indicate the nature and seat of this grave affection. But it is asked, how account for the cases, that terminate in coma and death either suddenly or more remotely?

I would by no means be understood, as contending that such cases may not eventuate in meningitis or other cerebral and spinal lesions, but is not an analogous termination often seen in typhus, typhoid and even in pernicious intermittent and scarlet fever, not to mention other affections. And have we ever thought of these as essentially brain affections? And this brings me to consider briefly the positive nature and source of this somewhat unique affection.

And here I must confess myself as convinced of Trousseau's correctness, as I understand him, in regarding the disease as a peculiar and essential fever, superinduced upon some morbific impression made primarily upon the great sympathitic and ganglionic system of nerves, and radiating therefrom to the various organs. Upon this theory of the affection it seems to me, can most, if not all, of the phenomena observed, be most rationally explained.

As to its causation, contrary to the popular impression, I have seen nothing to support the idea that it was infectious, or communicable, by one person to another. All the facts that I have observed controverted the notion. True, it often attacks several members of the same family, but never under my observation in circumstances to necessitate the conclusion that one took it from another. On the contrary the clinical facts, combined to support the idea, that all who were seized in the same household, were so seized from exposure to some morbific agency which was common to all attacked, some disease-engendering principle inhaled or ingested (probably the latter), to which those attacked were alike exposed. I say more likely ingested than inhaled, because in the cases I have observed, the premises and surroundings were faultlessly clean, the rooms well ventilated, the air indicating no offensive odor or impurity to the sense of smell. Moreover, the season in which they occurred, the ground and all external sources of miasmata being frozen, and thus innocuous, the premises being often in most elevated and airy localities, to my mind point less to an atmospherical source than to some other, unless indeed, it be some thermometric, barometric, hygrometric or electrical change, of whose conditions and their consequences we have little positive knowledge. Unless, I say, it be some such agency, not perceptible to the senses, it seems to me more rational to look to the ingesta for the proximate cause. Now the inquiry, *which* ingesta, whether liquid or solid, and what of either, can be the cause, of course leaves us with a wide field for speculation and hypothesis.

Diseased cereals suggest one, with some facts to support it. Various other sources are indicated by others. For my own part, I am inclined to suspect impure water as playing a leading part in the causation. I have no facts that are at all conclusive on the subject and would like to suggest it for consideration, more as hypothetical than aught else. But if it be the fact, as has been alleged that most of the cases have occurred in families, supplied by well-water from surface saturation, it strikes me as somewhat significant and suggestive. I believe most of the families in which I have seen the disease have depended upon this source for their water, and I shall be pleased to hear from other gentlemen present, if their observations either tally with or differ from my own.

DR. CRONYN.—I do not deny the existence of cerebro-spinal meningitis, but the present disease is not that affection. Have found the disease prevalent in some localities where families have used wells in common. In one locality on Tenth street I had five cases. Seems to be most prevalent where the water is sulphurous or saline. Would throw out the idea that water has to do with the disease for reflection.

DR. HAUENSTEIN.—I rise simply for the purpose of being on record as one having the opinion that the so called cerebro-spinal meningitis, which now prevails as an epidemic in this city, is a disease *sui generis* and, according to my limited observation of it, the disease seems to me so peculiar in its character and so different from any disease I have seen, that I am at a loss to detect any identity between it and the different forms of typhoid fever, which I have observed for the last twenty-five years or more. Its mode of attack is sudden, differing in that from typhoid fever as a rule When once established, its more prominent symptoms show, certainly, marked peculiarities. Its course from a few days, or even less, to a few months is a remarkable feature of cerebro-spinal meningitis. I have in no case observed marked tympanitis and in no case persistent diarrhea.

As regards treatment I have nothing new to suggest. I have administered anodynes and in one case I thought I saw marked improvement from the application of a blister to the nape of the neck and subsequent dressings with an ointment containing extract of belladonna. From the use of bromide of potassium and quinine I have not derived very satisfactory results. A case of the disease in question came into my hands, after having been treated for three weeks by an irregular practitioner, and died after the eleventh week of illness. Not only its neck was rigid, but its abdomen also and the lower extremities were rigidly flexed, the body extremely emaciated. I have also seen two cases occurring in the aged, one a woman of 60 years of age, and another a woman of 67 years of age, both died.

Dr. Bartlett had listened with great interest to the remarks of the gentlemen who had addressed the association. Considered the identity of the present epidemic with typhoid fever not well established. Believed food and drink had but slight, if any, influence in the causation of the disease. Referred it to atmospheric or electric influences, but admitted the whole subject was wrapped in mystery.

His observation covered thirty-one cases of the disease. Twenty-seven of these had occurred in his own practice, the remaining four in that of medical friends. Mortality, so far as known, six. Of the surviving patients twenty may be considered recovered. One other recovered except the sense of hearing. Of those dying two had died within twenty-four hours of attack, one on the 4th day, one on the 8th, and one on the 9th. All of his cases had opisthotonos in greater or less degree; contrary to the observation of others, diarrhea was not present in more than two or three cases. Cathartics and laxatives were required in all the others. Very few of the patients had tympany or tenderness on pressure of the abdomen. Functions of the mind more or less disturbed in all.

Treatment in all but the first three or four cases was as follows: Full dose of castor oil to move the bowels; if not promptly effective then injection of castor oil and turpentine; the "hot pack," by enveloping the patient, except the head, in a sheet wrung from hot water and applied as hot as it could be borne; over this a blanket and external to that other blankets or bedding; to the head a napkin wrung from cold water. Patient allowed hot or cold drinks *ad libitum*. The free use of spiritus ætheris nitrosum, potassæ acitatis, or other diuretic.

Profuse perspiration comes on generally in from fifteen to thirty minutes, and the patient was kept perspiring from four to six hours; then removed and warmly dressed. The effect seemed to be most salutary and beneficial as a preliminary treatment.

Though not convinced of its utility, counter-irritation to the spine and abdomen has been practiced in all the cases: the embrocation more usually employed is as follows:

℞ Ol. Terebinthinæ,
Tr. Aconite rad.,
Tr. Iodine, Co., aa ℥ss
Lini Saponis, q. s. ad. ℥vj.
M.

S. Apply every three or four hours along the entire spine. Internally, the bromides, at times combined with chloral. At later stages Iodide Potass., in three or four grain doses every four or six hours. Any increase of cerebral distress to be met by hot fomentations to the abdomen and moderate use of opium. The large and repeated doses recommended by some, though giving temporary relief, did not seem to have a favorable effect upon the course of the malady, especially contra-indicated when pupils were contracted In evidence of the value of the "hot pack," would cite two cases.

Was called April 4th to see the child of Mr. B., residing at No. 27 7th street, aged about thirteen years. Found patient with cerebro-spinal meningitis, had been ill for two days, but without medical advice. Predicted a fatal issue, all the worst symptoms being present. Used counter-irritation to spine. Cold to head, opiates and cathartics. Patient worse next day and evidently failing; died on Sunday evening, the second day after treatment, and fourth day of attack. Instructed the parents in the use of the hot pack, and directed its employment should another case occur.

Four days after death of patient referred to, was summoned in haste to attend a child of eight years in same family, with same symptoms. The hot pack had been promptly employed and vomiting and pain speedily relieved. Child was sleeping when he arrived. Advised hot applications continued with diuretics. Six hours later a child of five years was taken with same symptoms in a very severe degree; same treatment. Saw both patients in the evening, eight hours after his first call, and four hours after attack of younger child. Twenty-four hours after, younger child was permitted to be dressed and required no further medication. The older child was kept in bed three days and was fully recovered. Instances like these might be multiplied, but the procedure must commend itself to favorable consideration without further comments.

Dr. Phelps.—Had some cases on 5th street; in the house there is no drainage; water in the cellar. Family use pump water; had not thought that the water might be a cause.

Five years ago a healthy family moved into a house in the lower part of the city; had five children sick in a few months, on looking for the cause, found the sewer broken and its contents were running into the well.

Dr. Cronyn.—There is diarrhea in second stage in nine cases out of ten, and is controlled by opium. The water in wells is not always the same; more sulphur in a pint of water some days than others. In London, sewers and the atmosphere have an effect on wells.

Dr. Strong.—I cannot conceive how miasmata from external sources, in winter and early spring in this latitude, can be a very fruitful source of disease. We all know, I suppose, that freezing is only less destructive than heat to boiling point, to vegetable and animal miasmata, and that if not absolutely annihilating, it certainly suspends their active potency as morbific agents, while the congelation continues, so that I am inclined to put the amount of disease, originating from this source in freezing weather, at a pretty small minimum. But beyond much doubt, conditions of the atmosphere, pertaining to its temperature, weight, humidity and electricty, play a quite important, though as yet largely unrecognized, part in the production of disease.

But I can readily understand how the water of surface wells could be a prolific source of disease, especially in a season of protracted slight rain-fall as was the past autumn and winter.

The water of wells not being replenished, of course, by use and evaporation progressively diminishes; and just in the ratio of its decrease, its impurities, (more or less of which are incident to all undistilled water, albeit, when water is abundant and often changed, they are so widely diffused as to be innoxious), are proportionately increased. A glass of water from the same well may thus contain two, three or four times the amount of impurities at one time that it does at another; due entirely to this process of elimination and concentration.

It has been notorious the past winter and spring, throughout this city and over a large tract of country, that the wells have been very low and in very many cases wholly dried up. And it really does not seem to demand a very lively imagination, to rationally infer that this condition of an essential to life, ingested by many every hour, and by all with greater or less frequency, may have proved noxious and disease-engendering.

It has been a very common remark that the water, on which the citizens are wont to rely, has had an unnatural, often disagreeable taste.

Moreover, many of us are not quite disposed to acquit the Niagara water of all responsibility in the matter of sickness, especially at certain periods of every winter and spring, when it is a shocking abuse of the King's English, to call it any thing like pure.

I believe the better opinion of the profession is getting to be, that typhoid fever is often, if not uniformly generated by morbific principles ingested. Can it be any thing very illogical, to attribute this disease termed by so acute an observer as Trousseau a species of typhoid, to a source so analogous to that of typhoid as I am disposed to claim for it.

Dr. Cronyn.—In the last epidemic there was more true cerebro-spinal meningitis.

Dr. Phelps.—It was a very dry season.

Dr. Ring.—Have seen this disease only within past three weeks. Cannot speak of water as a cause. My cases have been near York street, in high dry places mostly. There is not so much here as at Attica.

My cases have been of a varied character. One a boy of thirteen had violent convulsions, could neither hear, see, or speak when first seen; a few hours of paroxysm, was followed by violent pain in the head; for two weeks saw objects double; during the third week had incontinence of urine. Another, a girl of six years, had fever and chill, convulsions, pulse feeble and weak, stupor as in malignant fever, used stimulants, dry heat, mustard. Case proved fatal in three hours. Others taken with more fever and pain in head.

In one child symptoms were very mild for a few days, then convulsions set in and death very soon followed. I am inclined to rely on morphine and quinine. Need stimulants and heat in bad cases. In mild cases gave opium, quinine, ipecac, in one case gave carb. ammonia. Keep the bowels open if possible. Thought it resembled typhus fever from reading, after seeing it, changed my mind.

Prevailing diseases, cerebro-spinal meningitis, pneumonia, whooping cough, and small pox. On motion adjourned.

L. F. HARVEY, Sec.

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ART. III—*Medical Society of the County of Albany. Semi-Annual Meeting, June 11th* 1872. *Reported by* JAMES S. BAILEY, M. D.

Dr. JOSEPH LEWI, President, in the Chair.

Dr. JAMES P. BOYD, Chairman of the Board of Censors, presented the names of the following gentlemen for admission to the Society.

Drs. F. C. Curtis, Isaac De Zouch, Wm. Hailes, S. A. Ingham, C. Lyon, J. H. Lasher, P. J. McGuire, B. U. Steenburgh, J. B. Stonehouse, Jr., Willis G. Tucker, E. Van Slyke, Wm. J. Warren.

They were admitted members on complying with the By-Laws.

Dr. CRAIG, moved that the names of Drs. Wand, Fisk and Starkweather, be referred back to the Board of Censors, inasmuch as they had not presented their credentials to the chairman —carried.

The Vice President, Dr. AMOS FOWLER, then delivered a short address, in which adverting to the duties of the Vice President, he promised at some future meeting of the society, to address them on the subject of Cerebro-Spinal Meningitis.

Dr. J. V. P. QUACKENBUSH, offered the following:

Resolved, That the thanks of this Society be presented to Dr Fowler for his recognition of the duty of the Vice President, to deliver a semi-annual address, and we hope that his promise to give us a paper on Cerebro-Spinal Meningitis, will be fulfilled on an early day. Adopted.

The Secretary, Dr. JOHN M. BIGELOW, then read a communication from a member of the society, Dr. J. V. R. Lansingh, Jr., of

Hartford, Indiana. It was entitled "An interesting case of Urethro-Vaginal Fistula, resulting from prolonged Labor." The report read as follows:

The following case is one of exceeding interest as well for the the rarity of its occurrence as the results which have rewarded a patient faith in nature's ability to cure and restore. To a young obstetrician, rupture of the perineum and fistulæ, offer severe discouragements which are scarcely lessened by wealth of counsel and the assistance of men of large experience, but in the unsettled West, where the principles of practice are decidedly crude, and the profession so much in dispute that it is a synonym for mere pretensions and lack of ability, it becomes a matter of grave responsibility and anxiety. Mrs. G., a healthy, well-formed brunette of 20, and a primipara was taken in labor on the 5th day of April, 1872, at 6 P. M. My partner was first called in, and remained in constant attendance. At 11 P. M. of that day, the membranes were ruptured, the os having dilated very slowly under continued and vigorous pains. The parts were soft, moist and seemingly favorable, and the head rapidly descended to the inferior strait, the occiput in the left acetabulum, and extension commenced, but was soon arrested. The perineum was rigid and unyielding, and the coccyx also which effectually resisted every attempt to produce extension with the finger passed in the rectum. Strong uterine contractions now came on, which wedged the head firmly in the pelvic walls, the vertex protruding about an inch. In this position it remained. All efforts to relax the rigid perineum failed and the uterine contractions gradually grew less frequent until they ceased. An inhalation of chloroform was given to relax the parts, but without effect. The usual means for producing contraction of the uterus were resorted to, in hopes of gaining ground by steadily forcing the child downward, but these all failed, and at 8 o'clock P. M. on the 6th inst., I was called in to try the vectis, (there being no forceps in the town,) and if failing in that, to perform craniotomy. An examination disclosed the condition I have stated. I could not introduce the vectis with facility, so ordered chloroform again administered, and in five minutes there was enough relaxation to allow a finger being introduced, which passing in the axilla, permitted sufficient traction to bring away the child. It was a large, well developed child, weighing some ten pounds, but had evidently been dead some hours. The placenta came away almost immediately, and the uterus contracted hard and firm under the hand pressed on the abdomen. The bladder was greatly distended, but although the parts were swollen and much tumefied, I readily passed the catheter and drew off a quart of urine. The patient rested well after her labor and manifested no untoward symptoms, until the second day, when she was attacked with puerperal fever, which however readily gave way to appropriate treatment. On the third day the desire to pass water ceased, which fact was but incidentally noticed by the attending physician, for this reason; the patient had been for some years suffering with severe hemorrhoids which caused frequent desire to go to stool, and she supposed that urine passed naturally at those times though there was no indication in the form of desire, so, when questioned as to that condition, she said it was all right and only once mentioned that there was a lack of desire. After some two weeks had passed, everything going well apparently during that time, she mentioned the fact of there being great heat and pain in the vagina, and said that the bladder appeared to be distended. I at once attempted to pass the cartheter and not only failed in that but was equally unsuccessful in an endeavor to find either the meatus or the urethra which generally is easily felt through the walls of the vagina running up behind the pubic bones. More than this I found the vagina filled with a mass of soft flabby membrane, which at first I supposed indicated a condition of recto-cele, but this opinion was found to be erroneous, on passing my finger in the rectum. I immediately explained to the patient that there was an unusual condition of affairs, which from my inability to diagnose, would necessitate an exposure. This was acceded to and with my partner I commenced a direct examination of the parts. The mass of membrane before mentioned, protruded from the labia and bore a black appearance, indicating a gangenous condition. This came away on slight traction and showed that sloughing was going on somewhere. Prosecuting our search further, we found an absence of a large part of the anterior wall of the vagina, the meatus urinarrius and nearly all of the urethra. Everything was congested, swollen and so much transformed, that at that time it was impossible to estimate the amount of loss to the substance there might be. Here then was a fistula, large in extent and annoying in the probability of permanent continuance. There was also loss of power in the sphincter vesicæ, which permitted a constant escape of urine into the vagina. Knowing the location of the fistula, of course a catheter could now be passed, but it was deemed impossible to retain it there, so for the time that idea was abandoned. A supporting treatment was at once instituted and the sheet anchor of dependence agreed upon in the free use of carbolic acid, gr v to the ℥. Shortly after, some obstinate symptoms led to a more complete examination, which resulted in finding a retroflexion of the uterus. This was restored by the sound and has not since caused trouble. Inflammmation subsided, but slowly, and nearly a month passed before the parts became normal in size and relations. An extended observation was then made, with the assistance of an impromptu parody on Sims speculum, and revealed the following conditions: the vagina normal except at the point of the fistula, which was over an inch long by a half inch in width, average estimate. All signs of the meatus and most of the urethra had disappeared, except a shallow sulcus or groove which marked the spot they had occupied. From the bladder a half inch, or perhaps less of the urethra projected forwards, distended sufficiently to allow my forefinger to be passed in the bladder. The fistulous opening was granulating well, and gave good promise of a complete restoration of the vaginal wall. For the urethra that much cannot be hoped. The sphincter muscle of the bladder still retains its paralyzed condition in spite of continued treatment. Can the prognosis of that condition be at all favorable? For two weeks the patient has worn a gum elastic catheter fastened in position, and through this the urine slowly passes as its secretes, a source of perpetual annoyance, a discouragement which produces unfavorable despondency. During all this time the general health has been built up and she sleeps well, eats very heartily, and though she sits up and walks around the room, yet she is disinclined to exercise. I can find no account of a similar case, though urethro-vaginal fistulæ are far from being rare, yet it is seldom that destruction of tissue proceeds so far that the entire urethra disappears. The cause of this seems evident in the long continued pressure of the child's head, but Thomas speaks of puerperal vaginitis as frequently being a cause. I think pressure was the cause in this case, 1st. because the urine passed involuntarily as early as the third day, and secondly, because sloughing went on very slowly with no marked symptoms of vaginitis inside of two weeks after accouchment, but the the puerperal condition may have hastened the work. Henceforth the urine will pass directly into the vagina, and be discharged from there in irregular and uncertain directions, excoriating the limbs and necessitating a relapse into the most important garment of infancy. Will it seriously disturb the vaginal or uterine functions, or do I fail to see advantages which might arise from intelligent exercise of operative interference, are questions which I leave to the discretion, sapientia et experientia of the gentlemen of the society.

Hartford City, Indiana, June 4th, 1873.

Dr. JAMES S. BAILEY, moved that the Secretary be directed to thank Dr. Lansingh, for his communication. Carried.

The following names were proposed for membership, Drs. James P. Boyd, Jr., John A. LaGrange and Gilbert Ullman.

The Society then adjourned.

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ART. IV.—*On the recent Advances in the Theory of Vision. By* H. HELMHOLTZ, (*of the Royal Society of London.*)

Translated from *Les Annales d' Oculstique*, BY F. W. ABBOTT, M. D.

(*Continued.*)

III. VISUAL PERCEPTIONS.

Colors, which engaged our attention in the preceding chapter, are among the most beautiful ornaments of nature, and they also aid us in distinguishing and recognizing objects; but the perception of them is much less important than that of *dimensions in space*, a perception which the eye furnishes to us with a rapidity and a variety of conditions which no other sense can rival. In appreciations of this kind, touch gives us, without doubt, more complete indications; it instructs us immediately as to the resistance, mass and weight. But, upon the one hand, touch can be exercised only where we are able to reach, and on the other hand, where we have to do with minute quantities, its appreciations are far from being as fine as those of which sight is capable. Nevertheless, as is demonstrated by observations made upon those born blind, touch is sufficient to develop in us the notions of space. We may even convince ourselves that the touch serves us constantly in controlling and correcting, if need be, the notions of space furnished by the eye, and that we always refer, as a last resort, to the information furnished by touch. Sight and touch, these two senses so diversely endowed, complement each other in the happiest manner in the accomplishment of their common task. While touch cannot overleap the narrow horizon by which it is bounded, sight stretches away to infinity, rivaling the flight of the boldest imagination.

This relation is of the greatest importance for the subject which now engages our attention. In fact, we have here to do only with the sense of sight; since that of touch suffices to completely develop in man the notions of space we may at once consider these notions as pre-existing essentially, and confine ourselves to seeking out how the concordance between the notions of space which are given us by sight and by touch is produced. We will reserve, to consider in the last place, the question of how sensual perceptions can transform themselves into notions of space.

However little attention we give it, we recognize first of all that the perception of impressions by different nervous apparatus is far from involving necessarily the notion of causes separated in space. Hence it is that our senses may perceive, in the same room, the light, the heat, the different sounds of a hamony and an odor, and that for all that, we recognize the simultaneous presence of all these agents in the air of the room.

So also, a composite color excites upon our retina three elementary sensations which we do not separate, although they probably reside indifferent nerves. A cord of a musical instrument, a human voice, emit simultaneously a fundamental sound and a series of hamonics which probably call into action as many different nerves, and the sensation remains none the less undivided. Finally, a mass of aliments affect differently the different parts of the tongue and act upon our smell at the moment of deglutition, nevertheless we generally unite the impressions which attain these different nervous systems in a single one which we call the taste of these aliments. A very little attention suffices to recognize by what parts of our body these different impressions reach us; but there does not result from this the necessity of localizing in different points of space the object which causes these sensations in us.

In the way in which vision is accomplished we find a fact of this kind; this is binocular vision, which is single, in spite of the separation of the impressions received upon the two retinas. We understand that this is a particular case of a much more general law.

If therefore the retina receives an image of the objects which fill the visual field, and if the different parts of this image excite different fibres, still this does not constitute a sufficient reason to attribute these sensations to parts differently situated in the visual field. There is evidently wanting the intervention of something which would lead us to the notion that these impressions correspond to different points of space.

This same problem is evidently propounded to us in an analogous manner with respect to touch. When the skin is simultaneously touched at two places, there results the irritation of two sensitive nerve fibres. But the separation of these fibres is not sufficient in itself for us to recognize that we have been touched in two different points and by two different objects. Our judgment may depend upon accessory circumstances in addition. When we place a finger of each hand upon the table, if we feel a grain of sand under both of these fingers, there is formed in us the notion of two grains of sand. If now we put both fingers together, and interpose a grain of sand, it may be that this grain will be felt by the very same two fibres as before, nevertheless the perception is reduced to that of one single grain. It is plain that here the simultaneous cognizance of the position of our members exercises its influence upon the notion which we form, and we know that when we form a false or incomplete idea of the position of our fingers, when they are crossed for example, we think that we feel two objects when in truth there is only one.

What then is the element which adds its effects to those of the state of isolation of the sensitive nerves, and which gives us a correct notion of the separation of objects in space? We here fall into a discussion which is not yet finished. Some respond, with Jean Muller, that the sensitive organ, retina or skin, perceives itself in space in consequence of an innate notion, and that we transport the received impressions to the place where we perceive the corresponding part of the organ. We will designate this opinion under the name of the *naturalistic theory* of the notions of space. It cuts short all research relating to the origin of these notions, since it considers them as something original, innate, as not susceptable of explanation.

The rival opinion has already been expressed in a general way by the English sensualists, such as, Malineux, J Locke, Jurine. Its application to the theory of vision could only be made very recently since it had to be preceded, among other things, by the study of the movements of the eye. It is especially owing to the discovery of the stereoscope by Wheatstone, that the difficulties and the contradictions of the naturalistic became apparent; a solution more in conformity with the ideas of the sensualists was then sought for, and to this we will give the name of the *emperical* theory of vision. This theory supposes that our sensations give us, as it relates to objects and external phenomena, only signs whose signification becomes familiar to us by experience and habit. In accordance with this theory, the perception of position in space is taught at first by the movements which we execute; that of the positions in the field of vision is attributable particularly to the movements of the eyes. It is clear that, just as is the case with the naturalistic theory, the empirical theory must suppose, between the sensations furnished by the different points of the retina, some peculiar differences attributable only to their difference of position; in truth if it were not so, it would be impossible to explain the localizations in the field of vision. It is necessary that the sensation of red which affects the retina, on the right should differ in some way from that of the red which affects this same retina on the left, and the difference between these two sensations of red must be other than the difference between two sensations of red, unequal, yet experienced successively at the same point of the retina. We will call with Lotze, *local sign* of the sensation, this difference which the same color produces at different points of the retina, and this without our knowing how to define, as yet, the nature of this difference. I consider it premature to construct any hypotheses whatever as to the nature of these local signs; it suffices for us to say that their existence is an irrefragable consequence of the perception of local differences in the field of vision.

Such, then, is the difference between the two opinions before us, The emperical theory considers the local signs as simply signs, their nature matters little to it; it admits that the significance of its signs, as it relates to the perception of the external world, can be and really is the result of experience. It becomes useless then to pre-suppose any accord whatever between the local signs and the local differences which correspond to them. According to the naturalistic theory, on the contrary, the local signs would be nothing less than immediate notions of the local differences, both of their nature and of their size. We see then that we are here engaged in the contest between two phylosophical systems, one of which supposes a pre-established harmony between the laws of thought and those of the external world, and the other seeks to deduce from experience all the conformity which may exist between the external world and our ideas.

So long as we limit ourselves to considering a superficial field, whose different parts are not apparently at a different distance from the eye; so long as we look, for example, only at the sky and the distant parts of the country, both theories account almost equally well for the perception of dimensions in this field. The image formed upon the retinal surface corresponds to the superficial image of which we acquire the notion. The disagreements are not of a sufficiently grave nature as not to be reconcilable with the naturalistic theory, by means of relatively simple explanations or hypotheses.

The first disagreement consists in the inverted position of the retinal image; this is the ancient stumbling block of the theory of vision, and has occasioned the most different theories; among which the two following have gained the most adherents: According to one, conformably to the ideas of Jean Muller, it is necessary, in the notion which sight furnishes us, to consider the ideas of top and bottom as only relative, as indicating simply the relations between the positions of the different objects; we suppose then that the accord between the top and the bottom as we perceive them by touch and by sight, is attributable to the experience which we may acquire by looking at and touching at the same time. According to the second of these theories, we must admit, with L. Fick, that, in the brain, where they come necessarily to give rise to perceptions, the visual and sensitive fibres are grouped, in relation to each other, in a suitable manner to produce accord between the top and the bottom, the right and the left; an hypothesis which actually fails of the slightest anatomical foundation.

The second theory which the naturalistic theories encounter is, that we see single in spite of the presence of two retinal images. This difficulty is avoided by supposing that the two retinas, simultaneously excited; convey to the brain only one single sensation, the *corresponding* or *identical* points of the two retinas being coupled two and two. At first sight, this hypothesis seems to rest on an anatomical basis: the two optic nerves cross and penetrate reciprocally each into the other, before losing themselves in the brain. Moreover, certain pathological facts seem to prove that the fibres of the right halves of the two retinas end in the right cerebral hemisphere, and those of the left halves in the left hemisphere. But the interlacing of the corresponding fibres is a different thing from their fusion, and we know no anatomical fact which proves that the fibres unite in the same manner as the nerve trunks.

The two difficulties which we have just noted do not exist in the *impirical theory*, for which it suffices that the sensual sign, simple and compound, be recognized as a sign of the real object. He who is ignorant of the existence of the two retinas, of the inverted images which they receive, who has heard neither of the nerve fibres, nor of the transmission of the sensation to the brain, does not doubt the accuracy of his visual perceptions. The existence of two retinal images and their inversion matter little to him. He knows the impressions which the eye transmits to him in the presence of such or such an object situated in such or such a way, and this is sufficient for him. Now, two circumstrnces enable us to learn the signification of the local signs as it relates to our visual sensations; on the one hand, as we see the movable parts of our body. it is possible for us, after having acquired by touch the notions of space and of motion, to learn what are the modifications which such or such a movement of the hand may produce in our visual impressions; on the hand, when we move the eye, and consequently the retina, this membrance changes its place in relation to the retinal image which remains almost motionless, and in this manner we learn the impression which the same object produces upon different parts of the retina. The unchanging retinal image, whose position upon the retina is changed by the different motions of the eye, behaves like a pair of dividers which we apply to a design to learn the equality or inequality of the different distances which we find on it. Even when, which I am far from considering as probable, the local signs might be scattered without order or system, the proceeding which we have just indicated would enable us to recognize which those are that correspond, and what, upon the different regions of the retina, are the lengths which correspond to equal distances in the field of vision.

In keeping with this hypothesis, the experiments of Fechner, of Volkman and my own have shown that even as it regards the adult and perfectly formed eye, the comparision of distances and of angles is only made with accuracy, in the visual field, in the case where the normal movements of the eyes enable us to bring these distances or these angles so that they occupy successively the same line or the same superficial angle of the retina.

The experiment which I am about to describe enables us, moreover, to show how much, even in the adult, the accord between the tactile and visual impressions rests upon a constant verification which the vision gives to our hands. Let us put on some spectacles furnished with prismatic glasses, if the refracting angles of these prisms are situated vertically and to the right; the effect of the glasses is that all objects appear displaced toward the right. After having looked at an object through these spectacles without having allowed the hands to appear in the visual field, if we close the eyes and try to grasp the object, we pass invariably to the right of it. But if leaving the eyes open, we carry the hand slowly towards the object, we are no longer deceived; it is easy to move the hand so that its image comes and touches that of the point which we wish to attain. Handling the object for a minute or two without losing it from sight suffices to establish between the vision and the hand so perfect an accord that we no longer deceive ourselves when we wish to grasp the objects after having closed our eyes. More also, we no longer deceive ourselves if we wish to use the other hand which has not yet been employed in the experiment. It is therefore not the touch which has put itself into accord with these false images furnished by the vision; it is the visual perception which has adapted itself to the tactile perception and allows itself to be rectified by it. If we remove the glasses some time without looking at the hands, and if we close the eyes some instants later, the hands deceives itself a new and passes this time to the left of the objects; the relation which was established between the tactile and visual perceptions continues its effect, while we have returned things to their normal condition.

It is sufficient to make preparations under a compound microscope, which inverts the images, or even to shave one's self before a glass, to learn to direct our movements according to a visual impression different from that to which we are accustomed.

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Editorial.

Subsidence of Cerebro-Spinal Meningitis as an Epidemic.

In making the announcement, that "Cerebro-Spinal Meningitis" in its epidemic form, has disappeared from Buffalo and near vicinity, we have little to add; indeed before such a fearful malady our words should be very few. Its appearance and disappearance is shrouded in profound mystery; its progress and termination uninfluenced by any agencies with which we are acquainted, a fearful and dreaded plague, such as has never visited this vicinity before. It is idle to liken it to diseases, with which we are all familiar, for whoever has watched the modes of attack, progress, and termination, see most clearly that it does not resemble in the remotest degree any other disease with which we are acquainted. The attempt to point out any probable or possible causes, has thus far failed, and all that physicians *know* of it, is comprised in what has been learned of the morbid changes which in some cases, and especially in cases of long standing, have been seen. These show that the disease is inflammatory in character, or at least, leads to the deposit of inflammatory products. The remarkable absence of all observable pathological change in some acute cases, cannot be set against, positive proof of its inflammatory character, where it is found. Sporadic cases will, no doubt, be observed, and physicians can never study such cases too attentively; the subject is too full of interest, to escape investigation and inquiry.

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Books Reviewed.

A Treatise on The Diseases of Infancy and Childhood. Second Edition. Enlarged and thoroughly revised. By. J. LEWIS SMITH, M. D. Philadelphia: Henry C. Lea, 1872.

The Second Edition of Dr. Smith's work on diseases of children comes to us considerably enlarged and greatly improved. The first edition met with a very favorable reception at the hands of the profession and was lacking but few of the essentials of a complete text book of children's diseases. The additions and corrections which have been made in the second edition leave nothing to be desired to make a text book which as authority in this class of disease is second to none.

The manner in which the subject matter of the different chapters is treated shows the author to be familiar with this department of medicine in all its details, and gives evidence of that knowledge which can only be gained by experience. We advice our medical friends to purchase this book and give its contents their careful attention. All other departments of medicine are now undergoing, change and improvement. Careful perusal of this work will show that in the care of children, change and improvement is not less marked than elsewhere.

The Urine and its Derangements. With the Application of Physiological Chemistry. To the Diagnosis and Treatment of the Constitutional as well as Local Diseases. By GEORGE HARLEY, M. D., F. R. S. With Illustrations. Philadelphia: Lindsay & Blakiston, 1872.

Entirely agreeing with the Author that the Urine offers no royal road to knowledge of disease, we nevertheless think that a properly made examination of the urine offers a large and valuable field to the practitioner both in confirming and assisting in the diagnosis of disease.

Many of the so called handbooks have been so loaded with minute discussions in chemistry and urology as to make them altogether distateful and valueless to the general practitioner. From this cause the subject has not received that attention which practitioners otherwise would have desired to give it. The work of Dr. Harley takes up the subject in the easy and familiar style of the lecture room, which at once arrests the attention of the reader, making it both interesting and profitable.

The subject of urinary examinations is one that not only requires a preparation, but also careful and diligent application. To such as are willing to enter the investigation determined to make it thorough, the work of Dr. Harley will prove a valuable assistant and is truly an acquisition of great worth.

The Treatment of Venereal Diseases. A Monograph on the Method pursued in the Vienna Hospital, under the direction of Prof. Von Sigmund; including all the Formulæ. By M. H. HENRY, M. D. New York: Wm. Wood & Co. 1872.

The Venereal Department of the Vienna Hospital is noted for its admirable arrangement and the excellent oportunities for clinical study which it offers.

We know of no one more adapted to present to English readers the Vienna system of practice, than Dr. Henry the Editor of the American Journal of Syphilography and Dermatology; whose cultivation of this branch of medicine has made him an authority on venereal diseases.

In speaking of the department of venereal diseases in the Vienna Hospital, and the course there pursued, the authors says:

"It results that a *resume* of experience in this establishment cannot fail greatly to extend our own knowledge and afford more reliable data and inductions in the treatment of this class of diseases in this city,—for *experientia docet* was assuredly never more applicable than in venereal therapeutics.

To the practitioner the minute details of treatment will be of especial interest and value; while the numerous formulæ (including about two hundred) afford a liberal choice in the management of these affections."

Clinical Lectures on the Diseases of Women. By Sir James Y. Simpson, Bart., M. D. D. C. L. Edited by Alexander R. Simpson, M. D. New York: D. Appleton & Co. 1872.

The distinguished author of this work is too widely known in the department of Gynæcology to need any extended notice from us.

The present Volume comprises fifty clinical lectures delivered by Prof Simpson on Diseases of Women, ten of which have never appeared in print. The lectures are from notes taken by the Editor, Dr. Alexander R. Simpson, aided by the lecture notes of the author. Most of the lectures were published in the Medical Times and Gazette and passed under the immediate eye of the author. A copious Table of contents will materialy aid the reader, as the lectures being clinical are not arranged in a systematic order.

The Works of Prof. Simpson, of which this is the concluding Volume, should no other monument be erected to his memory, will serve to perpetuate his fame wherever the English language is spoken; enshrining in the minds of the Medical World the memory of a man, who by his patient and unceasing toil and valuable discoveries has done more than any man of his time in the cause of Gynæcology.

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Books and Pamphlets Received.

Lectures on the Principles and practice of Physic. Delivered at King's College, London. By Sir Thomas Watson, Bart. M. D., F. R. S. In two Volumes. From the fifth English Edition. Edited with additions, by Henry Hartshorne A. M., M. D. Philadelphia: Henry C. Lea 1872. Buffalo: T. Butler & Son.

A Year-Book of Therapeutics, Pharmacy and Allied Sciences. Edited by Horatio C. Wood, Jr, M. D. New York: Wm. Wood & Co. 1872. Buffalo: Breed, Lent & Co.

Lectures on Food. By H. Letheby, M. B., M. A., Ph. D., etc. New York: Wm. Wood & Co. 1872. Buffalo: Breed, Lent & Co.

Archives of Opthalmology and Otology. Edited by Prof. H. Knapp, M. D. New York, and Prof. S. Moos, M. D., Heidelberg. New York: Wm. Wood & Co. 1872.

Thirty-Fourth Annual Report of the Superintendant of Education of the City of Buffalo. For the year 1871.

Annual address delivered before the Medical Association of Central New York, June 18th, 1872. By the President B. L. Hovey, M. D., of Rochester, and an Essay on Asiatic Cholera. By W. S. Ely, M. D., of Rochester. Rochester: Erastus Darrow, 1872.

A Plea for the Antiphlogistic Treatment of Disease. By Edward Montgomery, M. D. Reprint from St. Louis Medical Archives, July 1872.

Globe Microscope.—We omitted to state in our notice of the Globe Microscope in our last number that they could be procured in this city of Mr. Wm. Peabody for $2.50 each.

Prize Essays.—The Committee of the American Medical Editors' Association, appointed on a proper subject for prize essays, have recommended the following for the prize to be awarded in May, 1873:—

"The Pathology and Treatment of Diseases of the Ovaries."

And the prize to be awarded in May, 1874, the following:—

"At what stages of Pulmonary Tuberculosis is a change of climate desirable; what are the principles which should govern us in choosing the kind of change to be made; and the best localities in North America to send patients of this class?"

The prize offered is $100, and competition is open to all medical editors. *Boston M. & S. Journal.*

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EDITED BY JULIUS F. MINER, M. D.,
Professor of Special Surgery in the Buffalo Medical College; Surgeon to the Buffalo General Hospital, etc., etc.

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Bellevue Hospital Medical College.

CITY OF NEW YORK.

SESSION OF 1871-'72.

THE COLLEGE YEAR in this Institution embraces a Preliminary Autumnal Term, the Regular Winter Session, and a Summer Session.

THE PRELIMINARY AUTUMNAL TERM for 1871-72 will commence on Wednesday, September 13, 1871, and continue until the opening of the Regular Session. During this term, instruction consisting of didactic lectures on special subjects and daily clinical lectures, will be given, as heretofore, by the members of the Faculty. Students designing to attend the Regular Session are strongly recommended to attend the Preliminary Term, but attendance during the latter is not required. DURING THE PRELIMINARY TERM CLINICAL AND DIDACTIC LECTURES WILL BE GIVEN IN PRECISELY THE SAME NUMBER AND ORDER AS IN THE REGULAR SESSION.

THE REGULAR SESSION will commence on Wednesday, October 11th, and end about the 1st of March, 1872.

FACULTY.

ISAAC E. TAYLOR, M. D.,
Emeritus Prof of Obstetrics and Diseases of Women and Children, and President of the College.

JAMES R. WOOD, M. D., LL. D.,
Emeritus Prof. of Surgery.

FORDYCE BARKER, M. D.,
Prof. of Clinical Midwifery and Diseases of Women.

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Prof. of Practice of Surgery with Operations and Clinical Surgery.

LEWIS A. SAYRE, M. D.,
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ALEXANDER B. MOTT, M. D.,
Prof. of Surgical Anatomy with Operations and Clinical Surgery.

W. H. VAN BUREN, M. D.,
Prof. of Principles of Surgery with Diseases of the Genito-Urinary System & Clinical Surgery.

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STEPHEN SMITH, M. D.,
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AUSTIN FLINT, M. D.,
Prof. of Principles and Practice of Medicine and Clinical Medicine.

R. OGDEN DOREMUS, M. D.,
Prof. of Chemistry and Toxicology.

WILLIAM A. HAMMOND, M. D.,
Prof. of Diseases of the Mind and Nervous System and Clinical Medicine.

WILLIAM T. LUSK, M. D.,
Prof. of Obstetrics, Diseases of Women, Diseases of Infancy, and Clinical Midwifery.

AUSTIN FLINT, JR., M. D.,
Prof. of Physiology and Microscopy, and Secretary of the Faculty.

Special Lectures in the Regular Term.

OPHTHALMOLOGY—BY PROF. HENRY D. NOYES, M. D.

DISEASES OF THE SKIN—BY EDWARD L. KEYES, M. D.

A distinctive feature of the method of instruction in this College is the union of clinical and didactic teaching. All the lectures are given within the Hospital grounds. During the Regular Winter Session, in addition to four didactic lectures on every week day except Saturday, two or three hours are daily allotted to clinical instruction. The union of clinical and didactic teaching will also be carried out in the Summer Session, nearly all of the teachers in this Faculty being physicians and surgeons in the Bellevue Hospital and the great Charity Hospital on Blackwell's Island.

The Summer Session will consist of two Recitation Terms: the first, from March 15th to July 1st, and the second from September 1st to the opening of the Regular Session. During this Session there will be daily recitations in all the departments, held by a corps of examiners appointed by the regular Faculty. Regular clinics will also be held daily.

FEES FOR THE REGULAR SESSION.

Fees for Tickets to all the Lectures during the Preliminary and Regular Term, including Clinical Lectures	$140 00
Matriculation Fee	5 00
Demonstrator's Ticket (including material for dissection)	10 00
Graduation Fee	30 00

FEES FOR THE SUMMER SESSION.

Matriculation (Ticket good for the following Winter)	$5 00
Recitations and Clinics	35 00
Chemical Laboratory (including material)	25 00
Dissecting Ticket good for the following Winter)	10 00

For the Annual Circular and Catalogue, giving regulations, for graduations and other information, address the Secretary of the College, Prof. AUSTIN FLINT, Jr., Bellevue Hospital Medical College.

University of Buffalo

MEDICAL DEPARTMENT.

SESSION OF 1871-72

The Annual Course of Lectures in this Institution commences on the

FIRST WEDNESDAY IN NOVEMBER,

and continues sixteen weeks. The dissecting rooms will be opened on Wednesday, October 4th, four weeks previous to the commencement of the regular term.

FACULTY.

CHARLES B. COVENTRY, M. D.
Emeritus Professor of Physiology and Medical Jurisprudence.

CHARLES A. LEE, M. D.
Emeritus Professor of *Materia Medica* and Hygiene.

SANDFORD EASTMAN, M. D.
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JAMES P. WHITE, M. D.
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JULIUS F. MINER, M. D.
Professor of Special Surgery.

H. N. EASTMAN, M. D.
Lecturer on Materia Medica and Hygiene.

MILTON G. POTTER, M. D.
Professor of Anatomy.

M. B. FOLWELL, M. D.
Demonstrator of Anatomy.

Clinical Lectures will be given throughout the term, at the Buffalo Hospital of the Sisters of Charity, and at the Buffalo General Hospital, by Professors Rochester and Miner.

The Students of the College are allowed to attend at the Hospitals on stated days during the visits of the Medical and Surgical officers, and to accompany them in their services in the wards. Lectures by the clinical professors on the medical and surgical cases under observation are given in the college amphitheatre; and surgical operations are here performed before the class. Many important cases occur during the session; ample opportunities are afforded for witnessing the treatment of fractures and other surgical cases, observing the phenomena of disease, and becoming familiar with the practical application of the principles of diagnosis and therapeutics.

NO HOSPITAL FEES ARE REQUIRED.

The fees for the tickets of all the professors amount to $75. Matriculation fee (annually) $5.00. The fees for those who have attended two courses elsewhere is $25.00. The alumni of the College, and all who have attended two full courses at this institution are entitled to all the tickets on payment of the matriculation fee of $5.00.

Graduation fee $25.00. Graduates of any respectable college, after three years, will receive all the tickets on payment of the matriculation fee. Practitioners of five years standing, who have attended one course of lectures in a regular institution, will be received for [illegible]. The fee for the ticket of the demonstrator of anatomy is $5.00, which is optional except for one term before graduation.

For further information or circular, address

JULIUS F. MINER,
DEAN OF THE FACULTY.

BUFFALO, June, 1871

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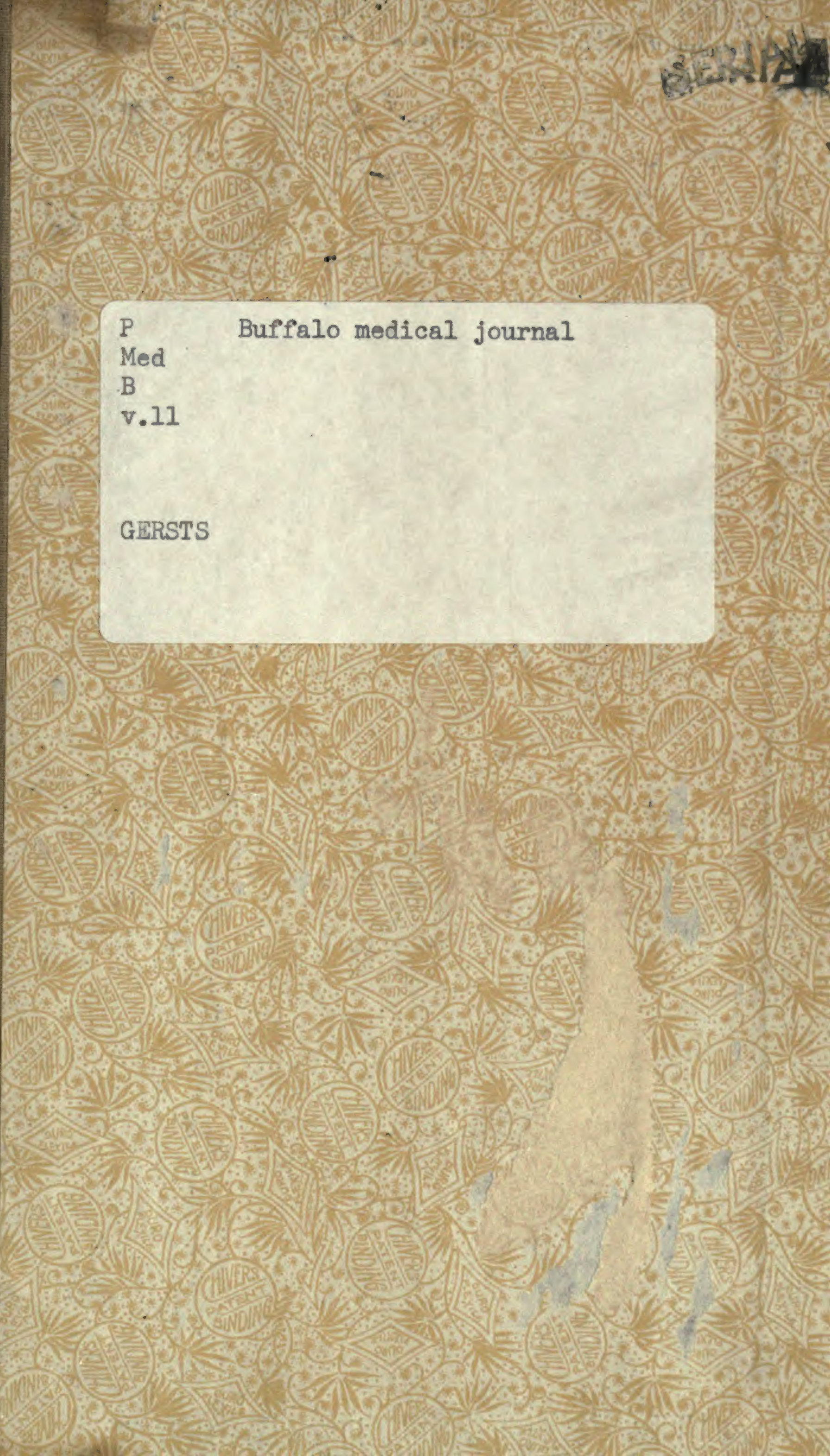

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